

Healthcare Cost and Utilization Project – HCUP
A Federal-State-Industry Partnership in Health Data
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CLINICAL CLASSIFICATIONS SOFTWARE (CCS) 2005

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ABSTRACT

The Clinical Classifications Software (CCS) is a tool for clustering patient diagnoses and procedures into a manageable number of clinically meaningful categories developed at the Agency for Healthcare Research and Quality (AHRQ). CCS is used for grouping conditions and procedures without having to sort through thousands of codes. This "clinical grouper" makes it easier to quickly understand patterns of diagnoses and procedures so that health plans, policymakers, and researchers can analyze costs, utilization, and outcomes associated with particular illnesses and procedures.

CCS collapses diagnosis and procedure codes from the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM), which contains over 12,000 diagnosis codes and 3,500 procedure codes. Without CCS, the large number of ICD-9-CM codes poses difficulties in statistical analysis and reporting.

CCS consists of two related classification systems, single level and multi-level, which are designed to meet different needs. *Single-level* CCS is most useful for ranking of diagnoses and procedures and for direct integration into risk adjustment and other software. *Multi-level* CCS is most useful when evaluating larger aggregations of conditions and procedures or exploring them in greater detail.

INTRODUCTION TO THE CLINICAL CLASSIFICATIONS SOFTWARE (CCS) 2005 User's Guide

Overview

Clinical Classifications Software provides a way to classify diagnoses and procedures into a limited number of categories. CCS aggregates individual ICD-9-CM codes into broad diagnosis and procedure groups for statistical analysis and reporting. This document provides a description of the CCS categorization scheme. Electronic files containing the translation of ICD-9-CM diagnosis and procedure codes into CCS categories can be downloaded from this site. (CCS was formally called CCHPR, Clinical Classifications for Health Policy Research.)

CCS is continually updated. The current version is based on ICD-9-CM codes that are valid for January 1980 through September 2005. CCS consists of two related classification systems. The first system, called the *single level CCS*, groups diagnoses into mutually exclusive categories. The single-level diagnosis CCS aggregates illnesses and conditions into 260 mutually exclusive categories. Similarly, the single-level procedure CCS aggregates procedures into 231 mutually exclusive categories, most of which are homogeneous.

The second system expands the single-level CCS into a hierarchical system, called the *multi-level CCS*. The multi-level CCS groups single-level CCS categories into broader categories (e.g., Infectious Diseases, Mental Disorders, and Injury). It also splits single-level CCS categories to provide more detail about particular groupings of codes.

CCS documentation provides a listing of which ICD-9-CM codes are included in each CCS diagnosis and procedure category.

Purpose

CCS categories can be employed in many types of projects analyzing data on diagnoses and procedures. For example, they can be used to:

- ◆ identify cases for disease-specific or procedure-specific studies;
- ◆ gain a better understanding of an institution's or health plan's distribution of patients across disease or procedure groupings;
- ◆ provide statistical information on characteristics, such as charges and length of stay, about relatively specific conditions;
- ◆ cross-classify procedures by diagnoses to provide insight into the variety of procedures performed for particular diagnoses.

Diagnoses and procedures for hospital inpatient stays are coded using the International Classification of Diseases, 9th Revision, Clinical Modification (ICD-9-CM), Fifth Edition (Public Health Service and Health Care Financing Administration, 1994). ICD-9-CM consists of about 12,000 diagnosis codes and 3,500 procedure codes. Although it is possible to present descriptive statistics for individual ICD-9-CM codes, it is often useful to aggregate codes into clinically meaningful categories that group similar conditions or procedures. For examples of the use of CCS categories, see Elixhauser and Steiner

(1999); Cowen et al., 1998; Elixhauser, Steiner, Whittington, et al. (1998); Elixhauser and McCarthy (1996); Duffy, Elixhauser, and Sommers (1996); and Agency for Health Care Policy and Research (1996). These reports aggregate individual hospital stays into larger diagnosis and procedure groups for statistical analysis and reporting. CCS is distinguished from other grouping schemes because it does not confound diagnosis with treatment, but keeps diagnoses and procedures separate in two different classifications.

History of Development

Clinical Classifications for Health Policy Research (CCHPR) Version 1 was the initial endeavor to construct clinically meaningful categories of diagnoses and procedures. The determining factor in creating these categories was the extent to which conditions and procedures could be grouped into relatively homogeneous clusters of interest to public policy researchers. CCHPR Version 1 consisted of 185 summary diagnosis categories and 172 summary procedure categories (Elixhauser, Andrews, and Fox, 1993).

CCHPR Version 2 was derived from the Version 1 summary diagnosis and procedure categories. Version 1 categories were modified on the basis of clinical homogeneity, frequency of occurrence in inpatient discharge data, and ICD-9-CM coding changes. The number of discharges in all categories was computed using 1991 California hospital inpatient data on all-listed diagnoses and all-listed procedures from the Healthcare Cost and Utilization Project State Inpatient Databases (SID).

The modified CCHPR schemes went through reviews during which the categories and ICD-9-CM code assignments were evaluated for accuracy and clinical significance. The reviews were conducted by trained medical records personnel and a physician with experience in medical classification. During this review process, additional categories were created, other categories were collapsed, and codes were reassigned when appropriate.

Version 2 contained more categories than Version 1. Some conglomerate categories (e.g., "Other gastrointestinal procedures") and high-frequency categories (e.g., "Pregnancy-related conditions") were divided into smaller, more clinically homogeneous groups.

Beginning with the 1999 update, an additional classification scheme (the multi-level CCS) was introduced, E codes (external causes of injury) received special treatment, and the name was changed to Clinical Classification Software (CCS), reflecting the broader use of the classifications beyond health policy research.

DESCRIPTION

Single-Level CCS

Diagnosis Codes

The single-level diagnosis classification scheme aggregates illnesses and conditions into 260 mutually exclusive categories, most of which are clinically homogeneous. Some heterogeneous categories were necessary; these combine several less common individual conditions within a body system.

All codes in the diagnosis section of ICD-9-CM are classified. In previous versions of the system, E codes (External Causes of Injury and Poisoning) were not classified because they are used sporadically in inpatient data; hence they were lumped into a single category (CCS 260). Beginning with the 1999 version of the CCS, a classification system for E codes was incorporated. The E code classification was developed by staff at the Centers for Disease and Control and Prevention (Centers for Disease Control, 1997). Examples of single-level CCS diagnosis categories are shown in Box 1.

Box 1—Examples of single-level CCS diagnosis categories		
Description	ICD-9-CM ¹ diagnosis codes used to map	CCS category
Essential Hypertension	4011 4019	98
Hypertension with complications and secondary hypertension	4010 40200 40201 40210 40211 40290 40291 4030 40300 40301 4031 40310 40311 4039 40390 40391 4040 40400 40401 40402 40403 4041 40410 40411 40412 40413 4049 40490 40491 40492 40493 40501 40509 40511 40519 40591 40599 4372	99

ICD-9-CM codes for the single-level diagnosis CCS categories are presented in Appendix A. The ICD-9-CM code assignments to each category are viewable in the accompanying executable file that provides the crosswalk from ICD-9-CM diagnosis codes to single-level CCS categories.

Labels for the single-level CCS diagnoses are available in Appendix A1.

Procedure Codes

The single-level procedure classification scheme contains 231 mutually exclusive categories. Many of the categories represent single procedures; however, some procedures that occur infrequently are grouped according to the body system on which they are performed, whether they are used for diagnostic or therapeutic purposes, and whether they are considered operating room or non-operating room procedures according to diagnosis related groups definitions (DRGs: Diagnosis related groups definitions manual, 1994). Examples of single-level CCS procedure categories are shown in Box 2.

¹ Additional information about the application of ICD-9-CM diagnosis and procedure codes can be found later in this document.

Box 2—Examples of single-level CCS procedure categories		
Description	ICD-9-CM procedure codes used to map	CCS category
Heart valve procedures	3500 3501 3502 3503 3504 3510 3511 3512 3513 3514 3520 3521 3522 3523 3524 3525 3526 3527 3528 3596 3599	43
Coronary artery bypass graft (CABG)	3610 3611 3612 3613 3614 3615 3616 3617 3619 362 363 3631 3632 3639	44

ICD-9-CM codes for the single-level procedure CCS categories are presented in Appendix B. The ICD-9-CM code assignments to each category are viewable in the accompanying executable files that provide the crosswalk from ICD-9-CM procedure codes to single-level CCS categories.

Labels for the single-level CCS procedures are available in Appendix B1.

Multi-level CCS

The multi-level CCS is a hierarchical system and is defined using both single-level CCS groupings and ICD-9-CM codes. There are four levels in the multi-level diagnosis CCS and three levels in the multi-level procedure CCS. The first of the four levels in the multi-level diagnosis CCS is broken into 17 categories. Similarly, the first of the three levels in the multi-level procedure CCS is also broken into 17 categories. These 17 categories broadly group the single-level CCS and ICD-9-CM codes into 17 body systems (e.g., “Diseases of the Circulatory System”). Note that multi-level CCS categories are comprised of single-level CCS categories or ICD-9-CM codes. Construction of multi-level CCS requires that ICD-9-CM codes first be assigned to single-level CCS.

Diagnosis Codes

The specificity of categories increases with the higher levels, such that second-level categories are more specific than first-level categories, third-level categories are more specific than second-level categories, and fourth-level categories are more specific than third-level categories.

The first-level categories are identified by one whole digit (1-17), second-level categories include 1 decimal point, third-level categories have 2 decimal places and fourth level categories have 3 decimal places.

Box 3 provides an example of multi-level CCS for diagnoses, showing how single-level CCS category 99 (from single-level CCS example in Box 1) is further subdivided into the more specific levels in the multi-level system.

Box 3—Examples of multi-level CCS diagnosis categories			
Multi-level CCS category	Description	ICD-9-CM diagnoses used to map	Single-level CCS used to map
7	Diseases of the circulatory system	--	96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121
7.1	Hypertension	--	98 99
7.1.1	Essential hypertension	--	98
7.1.2	Hypertension with complications and secondary hypertension	--	99
7.1.2.1	Hypertensive heart and/or renal disease	40200 40201 40210 40211 40290 40291 4030 40300 40301 4031 40310 40311 4039 40390 40391 4040 40400 40401 40402 40403 4041 40410 40411 40412 40413 4049 40490 40491 40492 40493	--
7.1.2.2	Other hypertensive complications	4010 40501 40509 40511 40519 40591 40599 4372	--

ICD-9-CM codes for the multi-level diagnosis CCS categories are presented in Appendix C.

Labels for the multi-level CCS diagnoses are available in Appendix C1.

Procedure Codes

There are only three levels in the multi-level procedure CCS. The specificity of the procedure categories increases with the higher levels, such that second-level categories are more specific than first-level categories and third-level categories are more specific than second-level categories.

The first-level categories are identified by one whole digit (1-17), second-level categories include 1 decimal point, and third-level categories have 2 decimal places.

Box 4 provides an example of multi-level CCS for procedures, showing how single-level CCS category 44 (from single-level CCS example in Box 2) is further subdivided into the more specific levels in the multi-level system.

Box 4—Examples of multi-level CCS procedure categories			
Multi-level CCS category	Description	ICD-9-CM diagnoses used to map	Single-level CCS used to map
7	Operations on the cardiovascular system	--	43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63
7.1	Heart valve procedures	--	43
7.2	Coronary artery bypass graft (CABG)	--	44
7.2.1	Bypass of one coronary artery	3611	--
7.2.2	Bypass of two coronary arteries	3612	--
7.2.3	Bypass of three coronary arteries	3613	--
7.2.4	Bypass of four coronary arteries	3614	--
7.2.5	Other bypass of coronary arteries	3610 3615 3616 3617 3619 362 363 3631 3632 3639	--

ICD-9-CM codes for the multi-level procedure CCS categories are presented in Appendix D.

Labels for the multi-level CCS procedures are available in Appendix D1.

NOTES ABOUT ICD-9-CM CODING CHANGES

Time period covered by CCS

In order to keep abreast of yearly changes in the ICD-9-CM codes, the CCS categories are updated annually after code assignments are reviewed and agreement is reached among the developers and medical records personnel.

The ICD-9-CM codes are revised every October. New codes are added, existing codes are deleted, and definitions of current codes are changed. CCS categories are revised in response to ICD-9-CM changes. ***The 2005 version of the CCS is valid for the time period January 1980 through September 2005.*** Using these CCS categories with data outside this time period will result in misclassification of ICD-9-CM codes.

ICD-9-CM codes requiring special treatment

CCS accounts for all changes in ICD-9-CM coding definitions during this time period except for several codes whose meaning changed to such an extent that their CCS category assignment changed as well. These codes must be explicitly assigned by the user when using older data. If you use more recent data (as described below) no special treatment is necessary. The codes are correctly assigned in the CCS program.

Assignment of these codes requires information on the year and quarter of service. When using data that span the time periods described below, these ICD-9-CM codes must be assigned to CCS categories explicitly according to the year and quarter of the data.

- ◆ Special treatment is required for the following diagnosis code:

From January 1980 to September 1993, ICD-9-CM diagnosis code '2510 ' should appear in CCS diagnosis category 50 (Diabetes mellitus with complications).

Beginning in October 1993, ICD-9-CM diagnosis code '2510 ' appears in CCS diagnosis category 51 (Other endocrine disorders). The current CCS program assigns this code to category 51.

- ◆ Special treatment is required for the following procedure codes:

From January 1980 to September 1989, ICD-9-CM procedure code '8159' should appear in CCS procedure category 153 (Hip replacement, total and partial).

Beginning in October 1989, ICD-9-CM procedure code '8159' appears in CCS procedure category 154 (Arthroplasty, other than hip or knee). The current CCS program assigns this code to category 154.

From January 1980 to September 1989, ICD-9-CM procedure codes '8162', '8163', and '8164' should appear in CCS procedure category 153 (Hip replacement, total and partial).

Beginning in October 2003, ICD-9-CM procedure codes '8162', '8163', and '8164' appear in CCS procedure category 158 (Spinal Fusion). The current CCS program assigns these codes to category 158.

DESCRIPTION OF DOWNLOADABLE FILES

System requirements

In order to use the CCS files you will need a program (such as WinZip®) that will allow you to decompress or “unzip” files. You will also need approximately 1,500,000 bytes free on your hard drive to accommodate all the single-level CCS files. You will need approximately 1,100,000 bytes free to accommodate all the multi-level CCS files once they are unzipped.

"Unzipping" files

There are two downloadable files, both self-extracting zipped files, called Single_Level_CCS_2005.zip (for the single-level CCS) and Multi_Level_CCS_2005.zip (for the multi-level CCS).

Single-level CCS

Single_Level_CCS_2005.zip contains two comma delimited files (.csv) (Microsoft Excel text) that translate ICD-9-CM codes into single-level CCS categories and two comma delimited files (.csv) (Microsoft Excel text) that provide descriptive labels for the single-level CCS categories. To use these zipped files, you must do the following:

1. Create a subdirectory (or folder) called CCS on your hard drive (e.g., MD C:\CCS). You will need a total of approximately 1,500,000 bytes free to accommodate all the files once they are unzipped.
2. Download and save Single_Level_CCS_2005.zip to this subdirectory.
3. Using WinZip (or comparable program) double click on Single_Level_CCS_2005.zip to expand the files.

The zipped file will unzip (expand for normal use) the following files. Note that the original file (Single_Level_CCS_2005.zip) will remain intact.

Filename	Purpose
Diagnosis CCS	
\$DXREF 2005.csv	Translation file that maps ICD-9-CM diagnosis codes into single-level CCS diagnosis categories, with full information about each ICD-9-CM code and brief CCS labels.
DXLABEL 2005.csv	Label file contains the full descriptive single-level CCS diagnosis category names to use when reporting the diagnosis categories.
Procedure CCS	
\$PRREF 2005.csv	Translation file that maps ICD-9-CM procedure codes into single-level CCS procedure categories, with full information about each ICD-9-CM code and brief CCS labels.
PRLABEL 2005.csv	Label file contains the full descriptive single-level CCS procedure category names to use when reporting the procedure categories.

Multi-level CCS

Multi_Level_CCS_2005.zip contains nine comma delimited files (.csv) (Microsoft Excel text) that translate ICD-9-CM codes into multi-level CCS categories and two comma delimited files (.csv) (Microsoft Excel text) that provide descriptive labels for the multilevel CCS categories. To use these zipped files, you must do the following:

1. Create a new subdirectory (or folder) on your hard drive. You will need a total of approximately 1,100,000 bytes free to accommodate all the files once they are unzipped.
2. Download and save Multi_Level_CCS_2005.zip to this subdirectory.
3. Using WinZip (or comparable program) double click on Multi_Level_CCS_2005.zip to expand the files.

The self-extracting zipped file will unzip (expand for normal use) the following files. Note that the original file (Multi_Level_CCS_2005.zip) will remain intact.

Filename	Purpose
Multi-level Diagnosis CCS	
DXLEVL1-01.csv	Translation file that maps level 2 multi-level diagnosis CCS categories into level 1 multi-level CCS categories
DXLEVL2-01.csv	Translation file that maps single-level diagnosis CCS categories into level 2 multi-level diagnosis CCS categories
DXLEVL3-01.csv	Translation file that maps single-level diagnosis CCS categories into level 3 multi-level diagnosis CCS categories
\$DXLVL3L-01.csv	Translation file that maps ICD-9-CM diagnosis codes into level 3 multi-level diagnosis CCS categories
\$DXLVL4L-01.csv	Translation file that maps ICD-9-CM diagnosis codes into level 4 multi-level diagnosis CCS categories
DXMLABEL-01.csv	Label file that contains the full descriptive multi-level CCS diagnosis category names to use when reporting the diagnosis categories.
Multi-level Procedure CCS	
PRLEVL1-01.csv	Translation file that maps level 2 multi-level procedure CCS categories into level 1 multi-level procedure CCS categories
PRLEVL2-01.csv	Translation file that maps single-level procedure CCS categories into level 2 multi-level procedure CCS categories

PRLEVL3-01.csv	Translation file that maps single-level procedure CCS categories into level 3 multi-level procedure CCS categories
\$PRLVL3L-01.csv	Translation file that maps ICD-9-CM procedure codes into level 3 multi-level procedure CCS categories
PRMLABEL-01.csv	Label file that contains the full descriptive multi-level CCS procedure category names to use when reporting the procedure categories.

Using translation files

For the single-level CCS, the translation files translate specific ICD-9-CM codes into CCS categories. The multi-level CCS is based upon the single-level CCS, so you must first assign single-level CCS categories in your data; then multi-level CCS categories can be created. (This process is used to avoid redundancy in ICD codes and massive translation files.)

How you use these files will depend on the software system being used. For example, if you are using SAS, you can adapt these translations to create a SAS PROC FORMAT. If you are using SPSS, you can adapt these translations into VALUE LABELS or into a series of recodes.

Representation of ICD-9-CM diagnosis codes

In practice, ICD-9-CM diagnoses are represented by 3- to 5-character codes with explicit decimals. In the files you downloaded and in the vast majority of data files, ICD-9-CM diagnoses are represented as 5-character alphanumeric codes with implicit decimals. (Alphanumeric codes are always enclosed in quotation marks.) Examples are given below.

Condition	ICD-9-CM diagnosis code	Alphanumeric code (with implicit decimals)
Pneumococcal pneumonia	481	'481 '
Pneumonia due to Klebsiella pneumoniae	482.0	'4820 '
Pneumonia due to Escherichia coli	482.82	'48282'
Single liveborn infant, born in hospital, delivered by cesarean delivery	V30.01	'V3001'

For proper handling of diagnosis codes:

- ◆ Alphanumeric diagnosis codes must be left-justified so that there are 2 spaces following a 3-character diagnosis code and 1 space following a 4-character diagnosis code. For example--'481 '.
- ◆ Trailing blanks should never be zero-padded (filled with zeroes so that all 5 characters are filled for codes that should be 3 or 4 characters long). For example--'481 ' should not be changed to '48100'.
- ◆ Leading zeroes must be preserved; they are significant.

Representation of ICD-9-CM procedure codes

In practice, ICD-9-CM procedures are represented by 3- or 4-character codes with explicit decimals. In the accompanying files and in the vast majority of data files, ICD-9-CM procedures are represented as 4-character alphanumeric codes with implicit decimals. (Alphanumeric codes are always enclosed in quotation marks.) Examples are given below.

Condition	ICD-9-CM procedure code	Alphanumeric code (with implicit decimals)
Incision of prostate	60.0	'600 '
Closed biopsy of prostate	60.11	'6011'

For proper handling of procedure codes:

- ◆ Alphanumeric procedure codes must be left-justified, so that there is always 1 space following a 3-character procedure code. For example--'600 '.
- ◆ Trailing blanks should never be zero-padded (filled with zeroes so that all 4 characters are filled for codes that should be 3 characters long). For example--'600 ' should not be changed to '6000'.
- ◆ Leading zeroes must be preserved; they are significant.

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Appendix A1

Single-Level CCS – Diagnoses

CATEGORY LABELS

- 1 Tuberculosis
- 2 Septicemia (except in labor)
- 3 Bacterial infection; unspecified site
- 4 Mycoses
- 5 HIV infection
- 6 Hepatitis
- 7 Viral infection
- 8 Other infections; including parasitic
- 9 Sexually transmitted infections (not HIV or hepatitis)
- 10 Immunizations and screening for infectious disease
- 11 Cancer of head and neck
- 12 Cancer of esophagus
- 13 Cancer of stomach
- 14 Cancer of colon
- 15 Cancer of rectum and anus
- 16 Cancer of liver and intrahepatic bile duct
- 17 Cancer of pancreas
- 18 Cancer of other GI organs; peritoneum
- 19 Cancer of bronchus; lung
- 20 Cancer; other respiratory and intrathoracic
- 21 Cancer of bone and connective tissue
- 22 Melanomas of skin
- 23 Other non-epithelial cancer of skin
- 24 Cancer of breast
- 25 Cancer of uterus
- 26 Cancer of cervix
- 27 Cancer of ovary
- 28 Cancer of other female genital organs
- 29 Cancer of prostate
- 30 Cancer of testis
- 31 Cancer of other male genital organs
- 32 Cancer of bladder
- 33 Cancer of kidney and renal pelvis
- 34 Cancer of other urinary organs
- 35 Cancer of brain and nervous system
- 36 Cancer of thyroid
- 37 Hodgkin`s disease
- 38 Non-Hodgkin`s lymphoma
- 39 Leukemias
- 40 Multiple myeloma
- 41 Cancer; other and unspecified primary
- 42 Secondary malignancies
- 43 Malignant neoplasm without specification of site
- 44 Neoplasms of unspecified nature or uncertain behavior
- 45 Maintenance chemotherapy; radiotherapy
- 46 Benign neoplasm of uterus
- 47 Other and unspecified benign neoplasm
- 48 Thyroid disorders
- 49 Diabetes mellitus without complication

- 50 Diabetes mellitus with complications
- 51 Other endocrine disorders
- 52 Nutritional deficiencies
- 53 Disorders of lipid metabolism
- 54 Gout and other crystal arthropathies
- 55 Fluid and electrolyte disorders
- 56 Cystic fibrosis
- 57 Immunity disorders
- 58 Other nutritional; endocrine; and metabolic disorders
- 59 Deficiency and other anemia
- 60 Acute posthemorrhagic anemia
- 61 Sickle cell anemia
- 62 Coagulation and hemorrhagic disorders
- 63 Diseases of white blood cells
- 64 Other hematologic conditions
- 65 Mental retardation
- 66 Alcohol-related mental disorders
- 67 Substance-related mental disorders
- 68 Senility and organic mental disorders
- 69 Affective disorders
- 70 Schizophrenia and related disorders
- 71 Other psychoses
- 72 Anxiety; somatoform; dissociative; and personality disorders
- 73 Preadult disorders
- 74 Other mental conditions
- 75 Personal history of mental disorder; mental and behavioral problems; observation and screening for mental condition
- 76 Meningitis (except that caused by tuberculosis or sexually transmitted disease)
- 77 Encephalitis (except that caused by tuberculosis or sexually transmitted disease)
- 78 Other CNS infection and poliomyelitis
- 79 Parkinson's disease
- 80 Multiple sclerosis
- 81 Other hereditary and degenerative nervous system conditions
- 82 Paralysis
- 83 Epilepsy; convulsions
- 84 Headache; including migraine
- 85 Coma; stupor; and brain damage
- 86 Cataract
- 87 Retinal detachments; defects; vascular occlusion; and retinopathy
- 88 Glaucoma
- 89 Blindness and vision defects
- 90 Inflammation; infection of eye (except that caused by tuberculosis or sexually transmitted disease)
- 91 Other eye disorders
- 92 Otitis media and related conditions
- 93 Conditions associated with dizziness or vertigo
- 94 Other ear and sense organ disorders
- 95 Other nervous system disorders
- 96 Heart valve disorders
- 97 Peri-; endo-; and myocarditis; cardiomyopathy (except that caused by tuberculosis or sexually transmitted disease)
- 98 Essential hypertension
- 99 Hypertension with complications and secondary hypertension
- 100 Acute myocardial infarction
- 101 Coronary atherosclerosis and other heart disease
- 102 Nonspecific chest pain

103 Pulmonary heart disease
104 Other and ill-defined heart disease
105 Conduction disorders
106 Cardiac dysrhythmias
107 Cardiac arrest and ventricular fibrillation
108 Congestive heart failure; nonhypertensive
109 Acute cerebrovascular disease
110 Occlusion or stenosis of precerebral arteries
111 Other and ill-defined cerebrovascular disease
112 Transient cerebral ischemia
113 Late effects of cerebrovascular disease
114 Peripheral and visceral atherosclerosis
115 Aortic; peripheral; and visceral artery aneurysms
116 Aortic and peripheral arterial embolism or thrombosis
117 Other circulatory disease
118 Phlebitis; thrombophlebitis and thromboembolism
119 Varicose veins of lower extremity
120 Hemorrhoids
121 the diseases of veins and lymphatics
122 Pneumonia (except that caused by tuberculosis or sexually transmitted disease)
123 Influenza
124 Acute and chronic tonsillitis
125 Acute bronchitis
126 Other upper respiratory infections
127 Chronic obstructive pulmonary disease and bronchiectasis
128 Asthma
129 Aspiration pneumonitis; food/vomitus
130 Pleurisy; pneumothorax; pulmonary collapse
131 Respiratory failure; insufficiency; arrest (adult)
132 Lung disease due to external agents
133 Other lower respiratory disease
134 Other upper respiratory disease
135 Intestinal infection
136 Disorders of teeth and jaw
137 Diseases of mouth; excluding dental
138 Esophageal disorders
139 Gastroduodenal ulcer (except hemorrhage)
140 Gastritis and duodenitis
141 Other disorders of stomach and duodenum
142 Appendicitis and other appendiceal conditions
143 Abdominal hernia
144 Regional enteritis and ulcerative colitis
145 Intestinal obstruction without hernia
146 Diverticulosis and diverticulitis
147 Anal and rectal conditions
148 Peritonitis and intestinal abscess
149 Biliary tract disease
150 Liver disease; alcohol-related
151 Other liver diseases
152 Pancreatic disorders (not diabetes)
153 Gastrointestinal hemorrhage
154 Noninfectious gastroenteritis
155 Other gastrointestinal disorders
156 Nephritis; nephrosis; renal sclerosis
157 Acute and unspecified renal failure
158 Chronic renal failure

159 Urinary tract infections
160 Calculus of urinary tract
161 Other diseases of kidney and ureters
162 Other diseases of bladder and urethra
163 Genitourinary symptoms and ill-defined conditions
164 Hyperplasia of prostate
165 Inflammatory conditions of male genital organs
166 Other male genital disorders
167 Nonmalignant breast conditions
168 Inflammatory diseases of female pelvic organs
169 Endometriosis
170 Prolapse of female genital organs
171 Menstrual disorders
172 Ovarian cyst
173 Menopausal disorders
174 Female infertility
175 Other female genital disorders
176 Contraceptive and procreative management
177 Spontaneous abortion
178 Induced abortion
179 Postabortion complications
180 Ectopic pregnancy
181 Other complications of pregnancy
182 Hemorrhage during pregnancy; abruptio placenta; placenta previa
183 Hypertension complicating pregnancy; childbirth and the puerperium
184 Early or threatened labor
185 Prolonged pregnancy
186 Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium
187 Malposition; malpresentation
188 Fetopelvic disproportion; obstruction
189 Previous C-section
190 Fetal distress and abnormal forces of labor
191 Polyhydramnios and other problems of amniotic cavity
192 Umbilical cord complication
193 Trauma to perineum and vulva
194 Forceps delivery
195 Other complications of birth; puerperium affecting management of mother
196 Normal pregnancy and/or delivery
197 Skin and subcutaneous tissue infections
198 Other inflammatory condition of skin
199 Chronic ulcer of skin
200 Other skin disorders
201 Infective arthritis and osteomyelitis (except that caused by tuberculosis or sexually transmitted disease)
202 Rheumatoid arthritis and related disease
203 Osteoarthritis
204 Other non-traumatic joint disorders
205 Spondylosis; intervertebral disc disorders; other back problems
206 Osteoporosis
207 Pathological fracture
208 Acquired foot deformities
209 Other acquired deformities
210 Systemic lupus erythematosus and connective tissue disorders
211 Other connective tissue disease
212 Other bone disease and musculoskeletal deformities

213 Cardiac and circulatory congenital anomalies
 214 Digestive congenital anomalies
 215 Genitourinary congenital anomalies
 216 Nervous system congenital anomalies
 217 Other congenital anomalies
 218 Liveborn
 219 Short gestation; low birth weight; and fetal growth retardation
 220 Intrauterine hypoxia and birth asphyxia
 221 Respiratory distress syndrome
 222 Hemolytic jaundice and perinatal jaundice
 223 Birth trauma
 224 Other perinatal conditions
 225 Joint disorders and dislocations; trauma-related
 226 Fracture of neck of femur (hip)
 227 Spinal cord injury
 228 Skull and face fractures
 229 Fracture of upper limb
 230 Fracture of lower limb
 231 Other fractures
 232 Sprains and strains
 233 Intracranial injury
 234 Crushing injury or internal injury
 235 Open wounds of head; neck; and trunk
 236 Open wounds of extremities
 237 Complication of device; implant or graft
 238 Complications of surgical procedures or medical care
 239 Superficial injury; contusion
 240 Burns
 241 Poisoning by psychotropic agents
 242 Poisoning by other medications and drugs
 243 Poisoning by nonmedicinal substances
 244 Other injuries and conditions due to external causes
 245 Syncope
 246 Fever of unknown origin
 247 Lymphadenitis
 248 Gangrene
 249 Shock
 250 Nausea and vomiting
 251 Abdominal pain
 252 Malaise and fatigue
 253 Allergic reactions
 254 Rehabilitation care; fitting of prostheses; and adjustment of devices
 255 Administrative/social admission
 256 Medical examination/evaluation
 257 Other aftercare
 258 Other screening for suspected conditions (not mental disorders or infectious disease)
 259 Residual codes; unclassified
 260 E Codes: All (external causes of injury and poisoning)
 2601 E Codes: Cut/pierceb
 2602 E Codes: Drowning/submersion
 2603 E Codes: Fall
 2604 E Codes: Fire/burn
 2605 E Codes: Firearm
 2606 E Codes: Machinery
 2607 E Codes: Motor vehicle traffic (MVT)
 2608 E Codes: Pedal cyclist; not MVT

2609 E Codes: Pedestrian; not MVT
2610 E Codes: Transport; not MVT
2611 E Codes: Natural/environment
2612 E Codes: Overexertion
2613 E Codes: Poisoning
2614 E Codes: Struck by; against
2615 E Codes: Suffocation
2616 E Codes: Adverse effects of medical care
2617 E Codes: Adverse effects of medical drugs
2618 E Codes: Other specified and classifiable
2619 E Codes: Other specified; NEC
2620 E Codes: Unspecified
2621 E Codes: Place of occurrence

Appendix B1

Single-Level CCS - Procedures

CATEGORY LABELS

- 1 Incision and excision of CNS
- 2 Insertion; replacement; or removal of extracranial ventricular shunt
- 3 Laminectomy; excision intervertebral disc
- 4 Diagnostic spinal tap
- 5 Insertion of catheter or spinal stimulator and injection into spinal canal
- 6 Decompression peripheral nerve
- 7 Other diagnostic nervous system procedures
- 8 Other non-OR or closed therapeutic nervous system procedures
- 9 Other OR therapeutic nervous system procedures
- 10 Thyroidectomy; partial or complete
- 11 Diagnostic endocrine procedures
- 12 Other therapeutic endocrine procedures
- 13 Corneal transplant
- 14 Glaucoma procedures
- 15 Lens and cataract procedures
- 16 Repair of retinal tear; detachment
- 17 Destruction of lesion of retina and choroid
- 18 Diagnostic procedures on eye
- 19 Other therapeutic procedures on eyelids; conjunctiva; cornea
- 20 Other intraocular therapeutic procedures
- 21 Other extraocular muscle and orbit therapeutic procedures
- 22 Tympanoplasty
- 23 Myringotomy
- 24 Mastoidectomy
- 25 Diagnostic procedures on ear
- 26 Other therapeutic ear procedures
- 27 Control of epistaxis
- 28 Plastic procedures on nose
- 29 Dental procedures
- 30 Tonsillectomy and/or adenoidectomy
- 31 Diagnostic procedures on nose; mouth and pharynx
- 32 Other non-OR therapeutic procedures on nose; mouth and pharynx
- 33 Other OR therapeutic procedures on nose; mouth and pharynx
- 34 Tracheostomy; temporary and permanent
- 35 Tracheoscopy and laryngoscopy with biopsy
- 36 Lobectomy or pneumonectomy
- 37 Diagnostic bronchoscopy and biopsy of bronchus
- 38 Other diagnostic procedures on lung and bronchus
- 39 Incision of pleura; thoracentesis; chest drainage
- 40 Other diagnostic procedures of respiratory tract and mediastinum
- 41 Other non-OR therapeutic procedures on respiratory system
- 42 Other OR therapeutic procedures on respiratory system
- 43 Heart valve procedures
- 44 Coronary artery bypass graft (CABG)
- 45 Percutaneous transluminal coronary angioplasty (PTCA)
- 46 Coronary thrombolysis
- 47 Diagnostic cardiac catheterization; coronary arteriography
- 48 Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator
- 49 Other OR heart procedures

50 Extracorporeal circulation auxiliary to open heart procedures
51 Endarterectomy; vessel of head and neck
52 Aortic resection; replacement or anastomosis
53 Varicose vein stripping; lower limb
54 Other vascular catheterization; not heart
55 Peripheral vascular bypass
56 Other vascular bypass and shunt; not heart
57 Creation; revision and removal of arteriovenous fistula or vessel-to-vessel cannula for dialysis
58 Hemodialysis
59 Other OR procedures on vessels of head and neck
60 Embolectomy and endarterectomy of lower limbs
61 Other OR procedures on vessels other than head and neck
62 Other diagnostic cardiovascular procedures
63 Other non-OR therapeutic cardiovascular procedures
64 Bone marrow transplant
65 Bone marrow biopsy
66 Procedures on spleen
67 Other therapeutic procedures; hemic and lymphatic system
68 Injection or ligation of esophageal varices
69 Esophageal dilatation
70 Upper gastrointestinal endoscopy; biopsy
71 Gastrostomy; temporary and permanent
72 Colostomy; temporary and permanent
73 Ileostomy and other enterostomy
74 Gastrectomy; partial and total
75 Small bowel resection
76 Colonoscopy and biopsy
77 Proctoscopy and anorectal biopsy
78 Colorectal resection
79 Local excision of large intestine lesion (not endoscopic)
80 Appendectomy
81 Hemorrhoid procedures
82 Endoscopic retrograde cannulation of pancreas (ERCP)
83 Biopsy of liver
84 Cholecystectomy and common duct exploration
85 Inguinal and femoral hernia repair
86 Other hernia repair
87 Laparoscopy
88 Abdominal paracentesis
89 Exploratory laparotomy
90 Excision; lysis peritoneal adhesions
91 Peritoneal dialysis
92 Other bowel diagnostic procedures
93 Other non-OR upper GI therapeutic procedures
94 Other OR upper GI therapeutic procedures
95 Other non-OR lower GI therapeutic procedures
96 Other OR lower GI therapeutic procedures
97 Other gastrointestinal diagnostic procedures
98 Other non-OR gastrointestinal therapeutic procedures
99 Other OR gastrointestinal therapeutic procedures
100 Endoscopy and endoscopic biopsy of the urinary tract
101 Transurethral excision; drainage; or removal urinary obstruction
102 Ureteral catheterization
103 Nephrotomy and nephrostomy
104 Nephrectomy; partial or complete

105 Kidney transplant
106 Genitourinary incontinence procedures
107 Extracorporeal lithotripsy; urinary
108 Indwelling catheter
109 Procedures on the urethra
110 Other diagnostic procedures of urinary tract
111 Other non-OR therapeutic procedures of urinary tract
112 Other OR therapeutic procedures of urinary tract
113 Transurethral resection of prostate (TURP)
114 Open prostatectomy
115 Circumcision
116 Diagnostic procedures; male genital
117 Other non-OR therapeutic procedures; male genital
118 Other OR therapeutic procedures; male genital
119 Oophorectomy; unilateral and bilateral
120 Other operations on ovary
121 Ligation of fallopian tubes
122 Removal of ectopic pregnancy
123 Other operations on fallopian tubes
124 Hysterectomy; abdominal and vaginal
125 Other excision of cervix and uterus
126 Abortion (termination of pregnancy)
127 Dilatation and curettage (D&C); aspiration after delivery or abortion
128 Diagnostic dilatation and curettage (D&C)
129 Repair of cystocele and rectocele; obliteration of vaginal vault
130 Other diagnostic procedures; female organs
131 Other non-OR therapeutic procedures; female organs
132 Other OR therapeutic procedures; female organs
133 Episiotomy
134 Cesarean section
135 Forceps; vacuum; and breech delivery
136 Artificial rupture of membranes to assist delivery
137 Other procedures to assist delivery
138 Diagnostic amniocentesis
139 Fetal monitoring
140 Repair of current obstetric laceration
141 Other therapeutic obstetrical procedures
142 Partial excision bone
143 Bunionectomy or repair of toe deformities
144 Treatment; facial fracture or dislocation
145 Treatment; fracture or dislocation of radius and ulna
146 Treatment; fracture or dislocation of hip and femur
147 Treatment; fracture or dislocation of lower extremity (other than hip or femur)
148 Other fracture and dislocation procedure
149 Arthroscopy
150 Division of joint capsule; ligament or cartilage
151 Excision of semilunar cartilage of knee
152 Arthroplasty knee
153 Hip replacement; total and partial
154 Arthroplasty other than hip or knee
155 Arthrocentesis
156 Injections and aspirations of muscles; tendons; bursa; joints and soft tissue
157 Amputation of lower extremity
158 Spinal fusion
159 Other diagnostic procedures on musculoskeletal system
160 Other therapeutic procedures on muscles and tendons

161 Other OR therapeutic procedures on bone
162 Other OR therapeutic procedures on joints
163 Other non-OR therapeutic procedures on musculoskeletal system
164 Other OR therapeutic procedures on musculoskeletal system
165 Breast biopsy and other diagnostic procedures on breast
166 Lumpectomy; quadrantectomy of breast
167 Mastectomy
168 Incision and drainage; skin and subcutaneous tissue
169 Debridement of wound; infection or burn
170 Excision of skin lesion
171 Suture of skin and subcutaneous tissue
172 Skin graft
173 Other diagnostic procedures on skin and subcutaneous tissue
174 Other non-OR therapeutic procedures on skin and breast
175 Other OR therapeutic procedures on skin and breast
176 Other organ transplantation
177 Computerized axial tomography (CT) scan head
178 CT scan chest
179 CT scan abdomen
180 Other CT scan
181 Myelogram
182 Mammography
183 Routine chest X-ray
184 Intraoperative cholangiogram
185 Upper gastrointestinal X-ray
186 Lower gastrointestinal X-ray
187 Intravenous pyelogram
188 Cerebral arteriogram
189 Contrast aortogram
190 Contrast arteriogram of femoral and lower extremity arteries
191 Arterio- or venogram (not heart and head)
192 Diagnostic ultrasound of head and neck
193 Diagnostic ultrasound of heart (echocardiogram)
194 Diagnostic ultrasound of gastrointestinal tract
195 Diagnostic ultrasound of urinary tract
196 Diagnostic ultrasound of abdomen or retroperitoneum
197 Other diagnostic ultrasound
198 Magnetic resonance imaging
199 Electroencephalogram (EEG)
200 Nonoperative urinary system measurements
201 Cardiac stress tests
202 Electrocardiogram
203 Electrographic cardiac monitoring
204 Swan-Ganz catheterization for monitoring
205 Arterial blood gases
206 Microscopic examination (bacterial smear; culture; toxicology)
207 Radioisotope bone scan
208 Radioisotope pulmonary scan
209 Radioisotope scan and function studies
210 Other radioisotope scan
211 Therapeutic radiology
212 Diagnostic physical therapy
213 Physical therapy exercises; manipulation; and other procedures
214 Traction; splints; and other wound care
215 Other physical therapy and rehabilitation
216 Respiratory intubation and mechanical ventilation

217 Other respiratory therapy
218 Psychological and psychiatric evaluation and therapy
219 Alcohol and drug rehabilitation/detoxification
220 Ophthalmologic and otologic diagnosis and treatment
221 Nasogastric tube
222 Blood transfusion
223 Enteral and parenteral nutrition
224 Cancer chemotherapy
225 Conversion of cardiac rhythm
226 Other diagnostic radiology and related techniques
227 Other diagnostic procedures (interview; evaluation; consultation)
228 Prophylactic vaccinations and inoculations
229 Nonoperative removal of foreign body
230 Extracorporeal shock wave lithotripsy; other than urinary
231 Other therapeutic procedures

Appendix C1C

Multi-Level CCS – Diagnoses

MULTI-LEVEL

CATEGORY LABELS [Single-Level CCS Diagnosis Category]

- 1 Infectious and parasitic diseases
 - 1.1 Bacterial infection
 - 1.1.1 Tuberculosis [1]
 - 1.1.2 Septicemia (except in labor) [2]
 - 1.1.2.1 Streptococcal septicemia
 - 1.1.2.2 Staphylococcal septicemia
 - 1.1.2.3 E Coli septicemia
 - 1.1.2.4 Other gram negative septicemia
 - 1.1.2.5 Other specified septicemia
 - 1.1.2.6 Unspecified septicemia
 - 1.1.3 Sexually transmitted infections (not HIV or hepatitis) [9]
 - 1.1.4 Other bacterial infections [3]
 - 1.2 Mycoses [4]
 - 1.2.1 Candidiasis of the mouth (thrush)
 - 1.2.2 Other mycoses
 - 1.3 Viral infection
 - 1.3.1 HIV infection [5]
 - 1.3.2 Hepatitis [6]
 - 1.3.3 Other viral infections [7]
 - 1.3.3.1 Herpes zoster infection
 - 1.3.3.2 Herpes simplex infection
 - 1.3.3.3 Other and unspecified viral infection
 - 1.4 Other infections; including parasitic [8]
 - 1.5 Immunizations and screening for infectious disease [10]
- 2 Neoplasms
 - 2.1 Colorectal cancer
 - 2.1.1 Cancer of colon [14]
 - 2.1.2 Cancer of rectum and anus [15]
 - 2.2 Other gastrointestinal cancer
 - 2.2.1 Cancer of esophagus [12]
 - 2.2.2 Cancer of stomach [13]
 - 2.2.3 Cancer of liver and intrahepatic bile duct [16]
 - 2.2.4 Cancer of pancreas [17]
 - 2.2.5 Cancer of other GI organs; peritoneum [18]
 - 2.3 Cancer of bronchus; lung [19]
 - 2.4 Cancer of skin
 - 2.4.1 Melanomas of skin [22]
 - 2.4.2 Other non-epithelial cancer of skin [23]
 - 2.5 Cancer of breast [24]
 - 2.6 Cancer of uterus and cervix
 - 2.6.1 Cancer of uterus [25]
 - 2.6.2 Cancer of cervix [26]
 - 2.7 Cancer of ovary and other female genital organs
 - 2.7.1 Cancer of ovary [27]
 - 2.7.2 Cancer of other female genital organs [28]
 - 2.8 Cancer of male genital organs
 - 2.8.1 Cancer of prostate [29]
 - 2.8.2 Cancer of testis [30]

- 2.8.3 Cancer of other male genital organs [31]
- 2.9 Cancer of urinary organs
 - 2.9.1 Cancer of bladder [32]
 - 2.9.2 Cancer of kidney and renal pelvis [33]
 - 2.9.3 Cancer of other urinary organs [34]
- 2.1 Cancer of lymphatic and hematopoietic tissue
 - 2.10.1 Hodgkins disease [37]
 - 2.10.2 Non-Hodgkins lymphoma [38]
 - 2.10.3 Leukemias [39]
 - 2.10.4 Multiple myeloma [40]
- 2.11 Cancer; other primary
 - 2.11.1 Cancer of head and neck [11]
 - 2.11.2 Cancer; other respiratory and intrathoracic [20]
 - 2.11.3 Cancer of bone and connective tissue [21]
 - 2.11.4 Cancer of brain and nervous system [35]
 - 2.11.5 Cancer of thyroid [36]
 - 2.11.6 Cancer; other and unspecified primary [41]
- 2.12 Secondary malignancies [42]
 - 2.12.1 Secondary malignancy of lymph nodes
 - 2.12.2 Secondary malignancy of lung
 - 2.12.3 Secondary malignancy of liver
 - 2.12.4 Secondary malignancy of brain/spine
 - 2.12.5 Secondary malignancy of bone
 - 2.12.6 Other secondary malignancy
- 2.13 Malignant neoplasm without specification of site [43]
- 2.14 Neoplasms of unspecified nature or uncertain behavior [44]
- 2.15 Maintenance chemotherapy; radiotherapy [45]
 - 2.15.1 Radiotherapy
 - 2.15.2 Chemotherapy
- 2.16 Benign neoplasms
 - 2.16.1 Benign neoplasm of uterus [46]
 - 2.16.2 Other and unspecified benign neoplasm [47]
 - 2.16.2.1 Benign neoplasm of ovary
 - 2.16.2.2 Benign neoplasm of colon
 - 2.16.2.3 Benign neoplasm of the thyroid
 - 2.16.2.4 Benign neoplasm of cerebral meninges
 - 2.16.2.5 Other and unspecified benign neoplasms
- 3 Endocrine; nutritional; and metabolic diseases and immunity disorders
 - 3.1 Thyroid disorders [48]
 - 3.1.1 Thyrotoxicosis with or without goiter
 - 3.1.2 Other thyroid disorders
 - 3.2 Diabetes mellitus without complication [49]
 - 3.3 Diabetes mellitus with complications [50]
 - 3.3.1 Diabetes with ketoacidosis or uncontrolled diabetes
 - 3.3.2 Diabetes with renal manifestations
 - 3.3.3 Diabetes with ophthalmic manifestations
 - 3.3.4 Diabetes with neurological manifestations
 - 3.3.5 Diabetes with circulatory manifestations
 - 3.3.6 Diabetes with unspecified complications
 - 3.3.7 Diabetes with other manifestations
 - 3.4 Other endocrine disorders [51]
 - 3.5 Nutritional deficiencies [52]
 - 3.5.1 Unspecified protein-calorie malnutrition
 - 3.5.2 Other malnutrition
 - 3.6 Disorders of lipid metabolism [53]
 - 3.7 Gout and other crystal arthropathies [54]

- 3.8 Fluid and electrolyte disorders [55]
 - 3.8.1 Hyposmolality
 - 3.8.2 Hypovolemia
 - 3.8.3 Hyperpotassemia
 - 3.8.4 Hypopotassemia
 - 3.8.5 Other fluid and electrolyte disorders
- 3.9 Cystic fibrosis [56]
- 3.1 Immunity disorders [57]
- 3.11 Other nutritional; endocrine; and metabolic disorders [58]
 - 3.11.1 Disorders of mineral metabolism
 - 3.11.2 Obesity
 - 3.11.3 Other and unspecified metabolic; nutritional; and endocrine disorders
- 4 Diseases of the blood and blood-forming organs
 - 4.1 Anemia
 - 4.1.1 Acute posthemorrhagic anemia [60]
 - 4.1.2 Sickle cell anemia [61]
 - 4.1.3 Deficiency and other anemia [59]
 - 4.1.3.1 Iron deficiency anemia
 - 4.1.3.2 Other deficiency anemia
 - 4.1.3.3 Aplastic anemia
 - 4.1.3.4 Chronic blood loss anemia
 - 4.1.3.5 Acquired hemolytic anemia
 - 4.1.3.6 Other specified anemia
 - 4.1.3.7 Anemia; unspecified
 - 4.2 Coagulation and hemorrhagic disorders [62]
 - 4.2.1 Coagulation defects
 - 4.2.2 Thrombocytopenia
 - 4.2.3 Other coagulation and hemorrhagic disorders
 - 4.3 Diseases of white blood cells [63]
 - 4.4 Other hematologic conditions [64]
- 5 Mental disorders
 - 5.1 Mental retardation [65]
 - 5.2 Alcohol and substance-related mental disorders
 - 5.2.1 Alcohol-related mental disorders [66]
 - 5.2.1.1 Acute alcoholic intoxication
 - 5.2.1.2 Other and unspecified alcohol dependence
 - 5.2.1.3 Nondependent alcohol abuse
 - 5.2.1.4 Other alcohol-related mental disorders
 - 5.2.2 Substance-related mental disorders [67]
 - 5.2.2.1 Opioid dependence
 - 5.2.2.2 Cocaine dependence
 - 5.2.2.3 Other; combined; and unspecified drug dependence
 - 5.2.2.4 Cocaine abuse
 - 5.2.2.5 Other; mixed; or unspecified drug abuse
 - 5.2.2.6 Other substance-related mental disorders
 - 5.3 Senility and organic mental disorders [68]
 - 5.3.1 Senile dementia; uncomplicated
 - 5.3.2 Arteriosclerotic dementia
 - 5.3.3 Transient organic psychotic conditions
 - 5.3.4 Specific nonpsychotic mental disorders due to organic brain damage
 - 5.3.5 Presenile dementia; uncomplicated
 - 5.3.6 Senile dementia with delirium
 - 5.3.7 Other senility and organic mental disorders
 - 5.4 Affective disorders [69]
 - 5.4.1 Major depressive disorder; single episode
 - 5.4.2 Major depressive disorder; recurrent episode

- 5.4.3 Neurotic depression
- 5.4.4 Bipolar affective disorder
- 5.4.5 Manic-depressive psychosis
- 5.4.6 Other affective disorders
- 5.5 Schizophrenia and related disorders [70]
 - 5.5.1 Paranoid schizophrenia
 - 5.5.2 Schizo-affective type
 - 5.5.3 Other schizophrenia
- 5.6 Other psychoses [71]
- 5.7 Anxiety; somatoform; dissociative; and personality disorders [72]
 - 5.7.1 Anxiety states
 - 5.7.2 Personality disorders
 - 5.7.3 Other anxiety; somatoform; dissociative; and personality disorders
- 5.8 Preadult disorders [73]
- 5.9 Other mental conditions [74]
 - 5.9.1 Adjustment reaction
 - 5.9.1.1 Brief depressive reaction
 - 5.9.1.2 Other adjustment reaction
 - 5.9.2 Depressive disorder; not elsewhere classified
 - 5.9.3 Other and unspecified mental conditions
- 5.1 Personal history of mental disorder; screening for mental condition [75]
- 6 Diseases of the nervous system and sense organs
 - 6.1 Central nervous system infection
 - 6.1.1 Meningitis (except that caused by TB or STD) [76]
 - 6.1.2 Encephalitis (except that caused by TB or STD) [77]
 - 6.1.3 Other CNS infection and poliomyelitis [78]
 - 6.2 Hereditary and degenerative nervous system conditions
 - 6.2.1 Parkinsons disease [79]
 - 6.2.2 Multiple sclerosis [80]
 - 6.2.3 Other hereditary and degenerative nervous system conditions [81]
 - 6.2.3.1 Disorders of the autonomic nervous system
 - 6.2.3.2 Other and unspecified hereditary and degenerative nervous conditions
 - 6.3 Paralysis [82]
 - 6.3.1 Hemiplegia
 - 6.3.2 Other paralysis
 - 6.4 Epilepsy; convulsions [83]
 - 6.4.1 Epilepsy
 - 6.4.2 Convulsions
 - 6.5 Headache; including migraine [84]
 - 6.5.1 Migraine
 - 6.5.2 Other headache
 - 6.6 Coma; stupor; and brain damage [85]
 - 6.7 Eye disorders
 - 6.7.1 Cataract [86]
 - 6.7.2 Retinal detachments; defects; vascular occlusion; and retinopathy [87]
 - 6.7.2.1 Retinal detachment with defect
 - 6.7.2.2 Other retinal detachment or defect
 - 6.7.2.3 Other retinal disorders
 - 6.7.3 Glaucoma [88]
 - 6.7.4 Blindness and vision defects [89]
 - 6.7.5 Inflammation; infection of eye (except that caused by TB or STD) [90]
 - 6.7.6 Other eye disorders [91]
 - 6.8 Ear conditions
 - 6.8.1 Otitis media and related conditions [92]
 - 6.8.1.1 Suppurative and unspecified otitis media
 - 6.8.1.2 Other otitis media and related conditions

- 6.8.2 Conditions associated with dizziness or vertigo [93]
- 6.8.3 Other ear and sense organ disorders [94]
- 6.9 Other nervous system disorders [95]
 - 6.9.1 Disorders of the peripheral nervous system
 - 6.9.2 Other central nervous system disorders
 - 6.9.3 Other nervous system symptoms and disorders
- 7 Diseases of the circulatory system
 - 7.1 Hypertension
 - 7.1.1 Essential hypertension [98]
 - 7.1.2 Hypertension with complications and secondary hypertension [99]
 - 7.1.2.1 Hypertensive heart and/or renal disease
 - 7.1.2.2 Other hypertensive complications
 - 7.2 Diseases of the heart
 - 7.2.1 Heart valve disorders [96]
 - 7.2.1.1 Chronic rheumatic disease of the heart valves
 - 7.2.1.2 Nonrheumatic mitral valve disorders
 - 7.2.1.3 Nonrheumatic aortic valve disorders
 - 7.2.1.4 Other heart valve disorders
 - 7.2.2 Peri-; endo-; and myocarditis; cardiomyopathy (except that caused by TB or STD) [97]
 - 7.2.2.1 Cardiomyopathy
 - 7.2.2.2 Other peri-; endo-; and myocarditis
 - 7.2.3 Acute myocardial infarction [100]
 - 7.2.4 Coronary atherosclerosis and other heart disease [101]
 - 7.2.4.1 Angina pectoris
 - 7.2.4.2 Unstable angina (intermediate coronary syndrome)
 - 7.2.4.3 Other acute and subacute forms of ischemic heart disease
 - 7.2.4.4 Coronary atherosclerosis
 - 7.2.4.5 Other forms of chronic heart disease
 - 7.2.5 Nonspecific chest pain [102]
 - 7.2.6 Pulmonary heart disease [103]
 - 7.2.7 Other and ill-defined heart disease [104]
 - 7.2.8 Conduction disorders [105]
 - 7.2.8.1 Atrioventricular block
 - 7.2.8.2 Bundle branch block
 - 7.2.8.3 Anomalous atrioventricular excitation
 - 7.2.8.4 Other conduction disorders
 - 7.2.9 Cardiac dysrhythmias [106]
 - 7.2.9.1 Paroxysmal supraventricular tachycardia
 - 7.2.9.2 Paroxysmal ventricular tachycardia
 - 7.2.9.3 Atrial fibrillation
 - 7.2.9.4 Atrial flutter
 - 7.2.9.5 Premature beats
 - 7.2.9.6 Sinoatrial node dysfunction
 - 7.2.9.7 Other cardiac dysrhythmias
 - 7.2.10 Cardiac arrest and ventricular fibrillation [107]
 - 7.2.11 Congestive heart failure; nonhypertensive [108]
 - 7.2.11.1 Congestive heart failure
 - 7.2.11.2 Heart failure
 - 7.3 Cerebrovascular disease
 - 7.3.1 Acute cerebrovascular disease [109]
 - 7.3.1.1 Intracranial hemorrhage
 - 7.3.1.2 Occlusion of cerebral arteries
 - 7.3.1.3 Acute but ill-defined cerebrovascular accident
 - 7.3.2 Occlusion or stenosis of precerebral arteries [110]
 - 7.3.3 Other and ill-defined cerebrovascular disease [111]
 - 7.3.4 Transient cerebral ischemia [112]

- 7.3.5 Late effects of cerebrovascular disease [113]
- 7.4 Diseases of arteries; arterioles; and capillaries
 - 7.4.1 Peripheral and visceral atherosclerosis [114]
 - 7.4.1.1 Atherosclerosis of arteries of extremities
 - 7.4.1.2 Peripheral vascular disease unspecified
 - 7.4.1.3 Other peripheral and visceral atherosclerosis
 - 7.4.2 Aortic; peripheral; and visceral artery aneurysms [115]
 - 7.4.2.1 Abdominal aortic aneurysm; without rupture
 - 7.4.2.2 Other aneurysm
 - 7.4.3 Aortic and peripheral arterial embolism or thrombosis [116]
 - 7.4.3.1 Arterial embolism and thrombosis of lower extremity artery
 - 7.4.3.2 Other arterial embolism and thrombosis
 - 7.4.4 Other circulatory disease [117]
 - 7.4.4.1 Hypotension
 - 7.4.4.2 Other and unspecified circulatory disease
- 7.5 Diseases of veins and lymphatics
 - 7.5.1 Phlebitis; thrombophlebitis and thromboembolism [118]
 - 7.5.1.1 Phlebitis and thrombophlebitis
 - 7.5.1.2 Other venous embolism and thrombosis
 - 7.5.2 Varicose veins of lower extremity [119]
 - 7.5.3 Hemorrhoids [120]
 - 7.5.4 Other diseases of veins and lymphatics [121]
- 8 Diseases of the respiratory system
 - 8.1 Respiratory infections
 - 8.1.1 Pneumonia (except that caused by TB or STD) [122]
 - 8.1.1.1 Pneumococcal pneumonia
 - 8.1.1.2 Other bacterial pneumonia
 - 8.1.1.3 Pneumonia; organism unspecified
 - 8.1.1.4 Other pneumonia
 - 8.1.2 Influenza [123]
 - 8.1.3 Acute and chronic tonsillitis [124]
 - 8.1.4 Acute bronchitis [125]
 - 8.1.5 Other upper respiratory infections [126]
 - 8.1.5.1 Acute upper respiratory infections of multiple or unspecified sites
 - 8.1.5.2 Chronic sinusitis
 - 8.1.5.3 Croup
 - 8.1.5.4 Other and unspecified upper respiratory infections
 - 8.2 Chronic obstructive pulmonary disease and bronchiectasis [127]
 - 8.2.1 Emphysema
 - 8.2.2 Chronic airway obstruction; not otherwise specified
 - 8.2.3 Obstructive chronic bronchitis
 - 8.2.4 Other chronic pulmonary disease
 - 8.3 Asthma [128]
 - 8.3.1 Chronic obstructive asthma
 - 8.3.1.1 Chronic obstructive asthma without status asthmaticus or exacerbation
 - 8.3.1.2 Chronic obstructive asthma with status asthmaticus
 - 8.3.1.3 Chronic obstructive asthma with acute exacerbation
 - 8.3.2 Other and unspecified asthma
 - 8.3.2.1 Other asthma without status asthmaticus or exacerbation
 - 8.3.2.2 Other asthma with status asthmaticus
 - 8.3.2.3 Other asthma with acute exacerbation
 - 8.4 Aspiration pneumonitis; food/vomitus [129]
 - 8.5 Pleurisy; pneumothorax; pulmonary collapse [130]
 - 8.5.1 Pleurisy; pleural effusion
 - 8.5.2 Pulmonary collapse; interstitial and compensatory emphysema
 - 8.5.3 Empyema and pneumothorax

- 8.6 Respiratory failure; insufficiency; arrest (adult) [131]
 - 8.6.1 Respiratory failure
 - 8.6.2 Other respiratory insufficiency
- 8.7 Lung disease due to external agents [132]
- 8.8 Other lower respiratory disease [133]
 - 8.8.1 Postinflammatory pulmonary fibrosis
 - 8.8.2 Painful respiration
 - 8.8.3 Other and unspecified lower respiratory disease
- 8.9 Other upper respiratory disease [134]
- 9 Diseases of the digestive system
 - 9.1 Intestinal infection [135]
 - 9.2 Disorders of teeth and jaw [136]
 - 9.3 Diseases of mouth; excluding dental [137]
 - 9.4 Upper gastrointestinal disorders
 - 9.4.1 Esophageal disorders [138]
 - 9.4.1.1 Esophagitis
 - 9.4.1.2 Other esophageal disorders
 - 9.4.2 Gastroduodenal ulcer (except hemorrhage) [139]
 - 9.4.2.1 Gastric ulcer
 - 9.4.2.2 Duodenal ulcer
 - 9.4.2.3 Peptic ulcer; site unspecified
 - 9.4.2.4 Gastrojejunal ulcer
 - 9.4.3 Gastritis and duodenitis [140]
 - 9.4.3.1 Acute gastritis
 - 9.4.3.2 Other specified gastritis
 - 9.4.3.3 Unspecified gastritis and gastroduodenitis
 - 9.4.3.4 Duodenitis
 - 9.4.4 Other disorders of stomach and duodenum [141]
 - 9.5 Abdominal hernia [143]
 - 9.5.1 Inguinal hernia
 - 9.5.1.1 Inguinal hernia with obstruction or gangrene
 - 9.5.1.2 Inguinal hernia without obstruction or gangrene
 - 9.5.2 Diaphragmatic hernia
 - 9.5.3 Other abdominal hernia
 - 9.5.3.1 Femoral hernia with obstruction/gangrene
 - 9.5.3.2 Femoral hernia without obstruction/gangrene
 - 9.5.3.3 Umbilical hernia with obstruction/gangrene
 - 9.5.3.4 Umbilical hernia without obstruction/gangrene
 - 9.5.3.5 Ventral hernia with obstruction/gangrene
 - 9.5.3.6 Ventral hernia without obstruction/gangrene
 - 9.5.3.7 Incisional hernia with obstruction/gangrene
 - 9.5.3.8 Incisional hernia without obstruction/gangrene
 - 9.5.3.9 Other and unspecified hernia
 - 9.6 Lower gastrointestinal disorders
 - 9.6.1 Appendicitis and other appendiceal conditions [142]
 - 9.6.1.1 Acute appendicitis with abscess or peritonitis
 - 9.6.1.2 Acute appendicitis without abscess or peritonitis
 - 9.6.1.3 Acute appendicitis; not otherwise specified
 - 9.6.1.4 Other appendiceal conditions
 - 9.6.2 Regional enteritis and ulcerative colitis [144]
 - 9.6.3 Intestinal obstruction without hernia [145]
 - 9.6.3.1 Paralytic ileus
 - 9.6.3.2 Impaction of intestine
 - 9.6.3.3 Peritoneal or intestinal adhesions
 - 9.6.3.4 Other intestinal obstruction
 - 9.6.4 Diverticulosis and diverticulitis [146]

- 9.6.4.1 Diverticulosis
- 9.6.4.2 Diverticulitis
- 9.6.5 Anal and rectal conditions [147]
- 9.6.6 Peritonitis and intestinal abscess [148]
- 9.7 Biliary tract disease [149]
 - 9.7.1 Cholelithiasis with acute cholecystitis
 - 9.7.2 Cholelithiasis with other cholecystitis
 - 9.7.3 Cholelithiasis without mention of cholecystitis
 - 9.7.4 Calculus of bile duct
 - 9.7.5 Cholecystitis without cholelithiasis
 - 9.7.6 Other biliary tract disease
- 9.8 Liver disease
 - 9.8.1 Liver disease; alcohol-related [150]
 - 9.8.2 Other liver diseases [151]
 - 9.8.2.1 Cirrhosis of liver without mention of alcohol
 - 9.8.2.2 Liver abscess and sequelae of chronic liver disease
 - 9.8.2.3 Ascites
 - 9.8.2.4 Other and unspecified liver disorders
- 9.9 Pancreatic disorders (not diabetes) [152]
 - 9.9.1 Acute pancreatitis
 - 9.9.2 Chronic pancreatitis
 - 9.9.3 Other pancreatic disorders
- 9.1 Gastrointestinal hemorrhage [153]
 - 9.10.1 Hemorrhage from gastrointestinal ulcer
 - 9.10.2 Melena
 - 9.10.3 Gastroesophageal laceration syndrome
 - 9.10.4 Other esophageal bleeding
 - 9.10.5 Hemorrhage of rectum and anus
 - 9.10.6 Hematemesis
 - 9.10.7 Hemorrhage of gastrointestinal tract
- 9.11 Noninfectious gastroenteritis [154]
- 9.12 Other gastrointestinal disorders [155]
 - 9.12.1 Constipation
 - 9.12.2 Dysphagia
 - 9.12.3 Other and unspecified gastrointestinal disorders
- 10 Diseases of the genitourinary system
 - 10.1 Diseases of the urinary system
 - 10.1.1 Nephritis; nephrosis; renal sclerosis [156]
 - 10.1.2 Acute and unspecified renal failure [157]
 - 10.1.2.1 Acute renal failure
 - 10.1.2.2 Unspecified renal failure
 - 10.1.3 Chronic renal failure [158]
 - 10.1.4 Urinary tract infections [159]
 - 10.1.4.1 Infections of kidney
 - 10.1.4.2 Cystitis and urethritis
 - 10.1.4.3 Urinary tract infection; site not specified
 - 10.1.5 Calculus of urinary tract [160]
 - 10.1.5.1 Calculus of kidney
 - 10.1.5.2 Calculus of ureter
 - 10.1.5.3 Other and unspecified urinary calculus
 - 10.1.6 Other diseases of kidney and ureters [161]
 - 10.1.6.1 Hydronephrosis
 - 10.1.6.2 Other and unspecified diseases of kidney and ureters
 - 10.1.7 Other diseases of bladder and urethra [162]
 - 10.1.7.1 Bladder neck obstruction
 - 10.1.7.2 Other and unspecified diseases of bladder and urethra

- 10.1.8 Genitourinary symptoms and ill-defined conditions [163]
 - 10.1.8.1 Hematuria
 - 10.1.8.2 Retention of urine
 - 10.1.8.3 Other and unspecified genitourinary symptoms
- 10.2 Diseases of male genital organs
 - 10.2.1 Hyperplasia of prostate [164]
 - 10.2.2 Inflammatory conditions of male genital organs [165]
 - 10.2.3 Other male genital disorders [166]
- 10.3 Diseases of female genital organs
 - 10.3.1 Nonmalignant breast conditions [167]
 - 10.3.2 Inflammatory diseases of female pelvic organs [168]
 - 10.3.2.1 Pelvic peritoneal adhesions
 - 10.3.2.2 Cervicitis and endocervicitis
 - 10.3.2.3 Pelvic inflammatory disease (PID)
 - 10.3.2.4 Other inflammatory diseases of female pelvic organs
 - 10.3.3 Endometriosis [169]
 - 10.3.4 Prolapse of female genital organs [170]
 - 10.3.5 Menstrual disorders [171]
 - 10.3.6 Ovarian cyst [172]
 - 10.3.7 Menopausal disorders [173]
 - 10.3.8 Female infertility [174]
 - 10.3.9 Other female genital disorders [175]
 - 10.3.9.1 Female genital pain and other symptoms
 - 10.3.9.2 Other and unspecified female genital disorders
- 11 Complications of pregnancy; childbirth; and the puerperium
 - 11.1 Contraceptive and procreative management [176]
 - 11.1.1 Sterilization
 - 11.1.2 Other contraceptive and procreation management
 - 11.2 Abortion-related disorders
 - 11.2.1 Spontaneous abortion [177]
 - 11.2.2 Induced abortion [178]
 - 11.2.3 Postabortion complications [179]
 - 11.3 Complications mainly related to pregnancy
 - 11.3.1 Ectopic pregnancy [180]
 - 11.3.2 Hemorrhage during pregnancy; abruptio placenta; placenta previa [182]
 - 11.3.2.1 Placenta previa
 - 11.3.2.2 Abruptio placenta
 - 11.3.2.3 Other hemorrhage during pregnancy; childbirth and the puerperium
 - 11.3.3 Hypertension complicating pregnancy; childbirth and the puerperium [183]
 - 11.3.3.1 Preeclampsia and eclampsia
 - 11.3.3.2 Other hypertension in pregnancy
 - 11.3.4 Early or threatened labor [184]
 - 11.3.4.1 Threatened premature labor
 - 11.3.4.2 Early onset of delivery
 - 11.3.4.3 Other early or threatened labor
 - 11.3.5 Prolonged pregnancy [185]
 - 11.3.6 Diabetes or abnormal glucose tolerance complicating pregnancy; childbirth; or the puerperium [186]
 - 11.3.7 Other complications of pregnancy [181]
 - 11.3.7.1 Infections of genitourinary tract during pregnancy
 - 11.3.7.2 Anemia during pregnancy
 - 11.3.7.3 Mental disorders during pregnancy
 - 11.3.7.4 Missed abortion
 - 11.3.7.5 Hyperemesis gravidarum
 - 11.3.7.6 Infectious and parasitic complications in mother affecting pregnancy
 - 11.3.7.7 Other and unspecified complications of pregnancy

- 11.4 Indications for care in pregnancy; labor; and delivery
 - 11.4.1 Malposition; malpresentation [187]
 - 11.4.1.1 Breech presentation
 - 11.4.1.2 Other malposition; malpresentation
 - 11.4.2 Fetopelvic disproportion; obstruction [188]
 - 11.4.2.1 Fetopelvic disproportion
 - 11.4.2.2 Other disproportion or obstruction
 - 11.4.3 Previous cesarean section [189]
 - 11.4.4 Fetal distress and abnormal forces of labor [190]
 - 11.4.4.1 Fetal distress
 - 11.4.4.2 Uterine inertia
 - 11.4.4.3 Precipitate labor
 - 11.4.4.4 Other abnormal forces of labor
 - 11.4.5 Polyhydramnios and other problems of amniotic cavity [191]
 - 11.4.5.1 Premature rupture of membranes
 - 11.4.5.2 Infection of amniotic cavity
 - 11.4.5.3 Other problems of amniotic cavity
- 11.5 Complications during labor
 - 11.5.1 Umbilical cord complication [192]
 - 11.5.1.1 Cord around neck with compression
 - 11.5.1.2 Other and unspecified cord entanglement with or without compression
 - 11.5.1.3 Other umbilical cord complications
 - 11.5.2 Trauma to perineum and vulva [193]
 - 11.5.2.1 First degree perineal laceration
 - 11.5.2.2 Second degree perineal laceration
 - 11.5.2.3 Third degree perineal laceration
 - 11.5.2.4 Fourth degree perineal laceration
 - 11.5.2.5 Other perineal laceration and trauma
 - 11.5.3 Forceps delivery [194]
- 11.6 Other complications of birth; puerperium affecting management of mother [195]
 - 11.6.1 Postpartum hemorrhage
 - 11.6.2 Complications of the puerperium
 - 11.6.3 Cervical incompetence
 - 11.6.4 Rhesus isoimmunization
 - 11.6.5 Intrauterine death
 - 11.6.6 Failed induction
 - 11.6.7 Other obstetrical trauma
 - 11.6.8 Other and unspecified complications of birth; puerperium affecting management of mother
- 11.7 Normal pregnancy and/or delivery [196]
 - 11.7.1 Normal delivery
 - 11.7.2 Multiple gestation
 - 11.7.3 Outcome of delivery (V codes)
- 12 Diseases of the skin and subcutaneous tissue
 - 12.1 Skin and subcutaneous tissue infections [197]
 - 12.1.1 Cellulitis and abscess
 - 12.1.1.1 Cellulitis and abscess of fingers and toes
 - 12.1.1.2 Cellulitis and abscess of face
 - 12.1.1.3 Cellulitis and abscess of arm
 - 12.1.1.4 Cellulitis and abscess of hand
 - 12.1.1.5 Cellulitis and abscess of leg
 - 12.1.1.6 Cellulitis and abscess of foot
 - 12.1.1.7 Other cellulitis and abscess
 - 12.1.2 Other skin and subcutaneous infections
 - 12.2 Other inflammatory condition of skin [198]
 - 12.3 Chronic ulcer of skin [199]
 - 12.3.1 Decubitus ulcer

- 12.3.2 Chronic ulcer of leg or foot
- 12.3.3 Other chronic skin ulcer
- 12.4 Other skin disorders [200]
- 13 Diseases of the musculoskeletal system and connective tissue
- 13.1 Infective arthritis and osteomyelitis (except that caused by TB or STD) [201]
- 13.2 Non-traumatic joint disorders
- 13.2.1 Rheumatoid arthritis and related disease [202]
- 13.2.2 Osteoarthritis [203]
 - 13.2.2.1 Osteoarthritis; localized
 - 13.2.2.2 Osteoarthritis; generalized and unspecified
- 13.2.3 Other non-traumatic joint disorders [204]
- 13.3 Spondylosis; intervertebral disc disorders; other back problems [205]
- 13.3.1 Spondylosis and allied disorders
- 13.3.2 Intervertebral disc disorders
- 13.3.3 Other back problems
 - 13.3.3.1 Cervical radiculitis
 - 13.3.3.2 Spinal stenosis; lumbar region
 - 13.3.3.3 Lumbago
 - 13.3.3.4 Sciatica
 - 13.3.3.5 Thoracic or lumbosacral neuritis or radiculitis; unspecified
 - 13.3.3.6 Backache; unspecified
 - 13.3.3.7 Other back pain and disorders
- 13.4 Osteoporosis [206]
- 13.5 Pathological fracture [207]
- 13.6 Acquired deformities
 - 13.6.1 Acquired foot deformities [208]
 - 13.6.2 Other acquired deformities [209]
- 13.7 Systemic lupus erythematosus and connective tissue disorders [210]
- 13.8 Other connective tissue disease [211]
- 13.9 Other bone disease and musculoskeletal deformities [212]
- 14 Congenital anomalies
- 14.1 Cardiac and circulatory congenital anomalies [213]
 - 14.1.1 Transposition of great vessels
 - 14.1.2 Tetralogy of Fallot
 - 14.1.3 Ventricular septal defect
 - 14.1.4 Atrial septal defect
 - 14.1.5 Endocardial cushion defects
 - 14.1.6 Pulmonary valve atresia and stenosis
 - 14.1.7 Aortic valve stenosis
 - 14.1.8 Patent ductus arteriosus
 - 14.1.9 Coarctation of aorta
 - 14.1.10 Pulmonary artery anomalies
 - 14.1.11 Cerebrovascular anomalies
 - 14.1.12 Other cardiac and circulatory congenital anomalies
- 14.2 Digestive congenital anomalies [214]
 - 14.2.1 Esophageal atresia/tracheoesophageal fistula
 - 14.2.2 Pyloric stenosis
 - 14.2.3 Rectal and large intestine atresia/stenosis
 - 14.2.4 Hirschsprung's disease
 - 14.2.5 Other digestive congenital anomalies
- 14.3 Genitourinary congenital anomalies [215]
 - 14.3.1 Undescended testicle
 - 14.3.2 Hypospadias and epispadias
 - 14.3.3 Obstructive genitourinary defect
 - 14.3.4 Other genitourinary congenital anomalies
- 14.4 Nervous system congenital anomalies [216]

- 14.4.1 Spina bifida
- 14.4.2 Congenital hydrocephalus
- 14.4.3 Other nervous system congenital anomalies
- 14.5 Other congenital anomalies [217]
- 14.5.1 Cleft palate without cleft lip
- 14.5.2 Cleft lip with or without cleft palate
- 14.5.3 Congenital hip dislocation
- 14.5.4 All other congenital anomalies
- 15 Certain conditions originating in the perinatal period
- 15.1 Liveborn [218]
- 15.2 Short gestation; low birth weight; and fetal growth retardation [219]
- 15.3 Intrauterine hypoxia and birth asphyxia [220]
- 15.4 Respiratory distress syndrome [221]
- 15.5 Hemolytic jaundice and perinatal jaundice [222]
- 15.6 Birth trauma [223]
- 15.7 Other perinatal conditions [224]
- 15.7.1 Respiratory conditions of fetus and newborn; other than respiratory distress
- 15.7.2 Infections specific to the perinatal period
- 15.7.3 Endocrine and metabolic disturbances of fetus and newborn
- 15.7.4 Other and unspecified perinatal conditions
- 16 Injury and poisoning
- 16.1 Joint disorders and dislocations; trauma-related [225]
- 16.2 Fractures
- 16.2.1 Fracture of neck of femur (hip) [226]
- 16.2.2 Skull and face fractures [228]
- 16.2.3 Fracture of upper limb [229]
- 16.2.3.1 Fracture of humerus
- 16.2.3.2 Fracture of radius and ulna
- 16.2.3.3 Other fracture of upper limb
- 16.2.4 Fracture of lower limb [230]
- 16.2.4.1 Fracture of tibia and fibula
- 16.2.4.2 Fracture of ankle
- 16.2.4.3 Other fracture of lower limb
- 16.2.5 Other fractures [231]
- 16.2.5.1 Fracture of vertebral column without mention of spinal cord injury
- 16.2.5.2 Fracture of ribs; closed
- 16.2.5.3 Fracture of pelvis
- 16.2.5.4 Other and unspecified fracture
- 16.3 Spinal cord injury [227]
- 16.4 Intracranial injury [233]
- 16.4.1 Concussion
- 16.4.2 Other intracranial injury
- 16.5 Crushing injury or internal injury [234]
- 16.6 Open wounds
- 16.6.1 Open wounds of head; neck; and trunk [235]
- 16.6.2 Open wounds of extremities [236]
- 16.7 Sprains and strains [232]
- 16.8 Superficial injury; contusion [239]
- 16.9 Burns [240]
- 16.1 Complications
- 16.10.1 Complication of device; implant or graft [237]
- 16.10.1.1 Malfunction of device; implant; and graft
- 16.10.1.2 Infection and inflammation--internal prosthetic device; implant; and graft
- 16.10.1.3 Other complications of internal prosthetic device; implant; and graft
- 16.10.1.4 Complications of transplants and reattached limbs
- 16.10.2 Complications of surgical procedures or medical care [238]

- 16.10.2.1 Cardiac complications
- 16.10.2.2 Respiratory complications
- 16.10.2.3 Gastrointestinal complications
- 16.10.2.4 Urinary complications
- 16.10.2.5 Hemorrhage or hematoma complicating a procedure
- 16.10.2.6 Postoperative infection
- 16.10.2.7 Other complications of surgical and medical procedures
- 16.11 Poisoning
 - 16.11.1 Poisoning by psychotropic agents [241]
 - 16.11.2 Poisoning by other medications and drugs [242]
 - 16.11.3 Poisoning by nonmedicinal substances [243]
- 16.12 Other injuries and conditions due to external causes [244]
- 17 Symptoms; signs; and ill-defined conditions and factors influencing health status
 - 17.1 Symptoms; signs; and ill-defined conditions
 - 17.1.1 Syncope [245]
 - 17.1.2 Fever of unknown origin [246]
 - 17.1.3 Lymphadenitis [247]
 - 17.1.4 Gangrene [248]
 - 17.1.5 Shock [249]
 - 17.1.6 Nausea and vomiting [250]
 - 17.1.7 Abdominal pain [251]
 - 17.1.8 Malaise and fatigue [252]
 - 17.1.9 Allergic reactions [253]
 - 17.2 Factors influencing health care
 - 17.2.1 Rehabilitation care; fitting of prostheses; and adjustment of devices [254]
 - 17.2.2 Administrative/social admission [255]
 - 17.2.3 Medical examination/evaluation [256]
 - 17.2.4 Other aftercare [257]
 - 17.2.5 Other screening for suspected conditions (not mental disorders or infectious disease) [258]
- 18 Residual codes; unclassified; all E codes [259 and 260]

Appendix D1

Multi-Level CCS – Procedures

MULTI-LEVEL

CATEGORY LABELS [Single-Level CCS Procedure Category]

- 1 Operations on the nervous system
 - 1.1 Incision and excision of CNS [1]
 - 1.1.1 Craniotomy and craniectomy
 - 1.1.2 Incision of cerebral meninges
 - 1.1.3 Other incision and excision of CNS
 - 1.2 Insertion; replacement; or removal of extracranial ventricular shunt [2]
 - 1.3 Laminectomy; excision intervertebral disc [3]
 - 1.3.1 Excision of intervertebral disc
 - 1.3.2 Laminectomy
 - 1.4 Diagnostic spinal tap [4]
 - 1.5 Insertion of catheter or spinal stimulator and injection into spinal canal [5]
 - 1.6 Decompression peripheral nerve [6]
 - 1.6.1 Release of carpal tunnel
 - 1.6.2 Other lysis of adhesion and decompression of peripheral nerves
 - 1.7 Other diagnostic nervous system procedures [7]
 - 1.8 Other non-OR or closed therapeutic nervous system procedures [8]
 - 1.9 Other OR therapeutic nervous system procedures [9]
- 2 Operations on the endocrine system
 - 2.1 Thyroidectomy; partial or complete [10]
 - 2.2 Diagnostic endocrine procedures [11]
 - 2.3 Other therapeutic endocrine procedures [12]
- 3 Operations on the eye
 - 3.1 Corneal transplant [13]
 - 3.2 Glaucoma procedures [14]
 - 3.3 Lens and cataract procedures [15]
 - 3.3.1 Insertion of prosthetic lens
 - 3.3.2 Phacoemulsification and aspiration of cataract
 - 3.3.3 Other extracapsular extraction of lens
 - 3.3.4 Other lens and cataract procedures
 - 3.4 Repair of retinal tear; detachment [16]
 - 3.5 Destruction of lesion of retina and choroid [17]
 - 3.6 Diagnostic procedures on eye [18]
 - 3.7 Other therapeutic procedures on eyelids; conjunctiva; cornea [19]
 - 3.8 Other intraocular therapeutic procedures [20]
 - 3.9 Other extraocular muscle and orbit therapeutic procedures [21]
- 4 Operations on the ear
 - 4.1 Tympanoplasty [22]
 - 4.2 Myringotomy [23]
 - 4.3 Mastoidectomy [24]
 - 4.4 Diagnostic procedures on ear [25]
 - 4.5 Other therapeutic ear procedures [26]
- 5 Operations on the nose; mouth; and pharynx
 - 5.1 Control of epistaxis [27]
 - 5.2 Plastic procedures on nose [28]
 - 5.3 Dental procedures [29]
 - 5.4 Tonsillectomy and/or adenoidectomy [30]
 - 5.4.1 Tonsillectomy without adenoidectomy

- 5.4.2 Tonsillectomy with adenoidectomy
- 5.4.3 Adenoidectomy without tonsillectomy
- 5.4.4 Control of hemorrhage after tonsillectomy or adenoidectomy
- 5.5 Diagnostic procedures on nose; mouth and pharynx [31]
 - 5.5.1 Diagnostic procedures on nasal sinuses
 - 5.5.2 Other diagnostic procedures on nose; mouth and pharynx
- 5.6 Other non-OR therapeutic procedures on nose; mouth and pharynx [32]
 - 5.6.1 Non-OR procedures on nasal sinuses
 - 5.6.2 Other non-OR procedures on nasal sinuses
- 5.7 Other OR therapeutic procedures on nose; mouth and pharynx [33]
 - 5.7.1 OR procedures on nasal sinuses
 - 5.7.2 Excision salivary gland
 - 5.7.3 Repair cleft lip
 - 5.7.4 Correction cleft palate
 - 5.7.5 Incision and drainage of tonsils
 - 5.7.6 Other procedures on nose; mouth and pharynx
- 6 Operations on the respiratory system
 - 6.1 Tracheostomy; temporary and permanent [34]
 - 6.2 Tracheoscopy and laryngoscopy with biopsy [35]
 - 6.3 Lobectomy or pneumonectomy [36]
 - 6.4 Diagnostic bronchoscopy and biopsy of bronchus [37]
 - 6.4.1 Bronchoscopy without biopsy
 - 6.4.2 Endoscopic biopsy of bronchus
 - 6.4.3 Needle biopsy of lung
 - 6.4.4 Endoscopic biopsy of lung
 - 6.5 Other diagnostic procedures on lung and bronchus [38]
 - 6.6 Incision of pleura; thoracentesis; chest drainage [39]
 - 6.6.1 Closed chest drainage
 - 6.6.2 Open chest drainage
 - 6.6.3 Thoracentesis
 - 6.7 Other diagnostic procedures of respiratory tract and mediastinum [40]
 - 6.8 Other non-OR therapeutic procedures on respiratory system [41]
 - 6.9 Other OR therapeutic procedures on respiratory system [42]
- 7 Operations on the cardiovascular system
 - 7.1 Heart valve procedures [43]
 - 7.2 Coronary artery bypass graft (CABG) [44]
 - 7.2.1 Bypass of one coronary artery
 - 7.2.2 Bypass of two coronary arteries
 - 7.2.3 Bypass of three coronary arteries
 - 7.2.4 Bypass of four coronary arteries
 - 7.2.5 Other bypass of coronary arteries
 - 7.3 Percutaneous transluminal coronary angioplasty (PTCA) [45]
 - 7.3.1 Single vessel PTCA
 - 7.3.2 Multiple vessel PTCA
 - 7.4 Coronary thrombolysis [46]
 - 7.5 Diagnostic cardiac catheterization; coronary arteriography [47]
 - 7.5.1 Coronary arteriography
 - 7.5.2 Cardiac catheterization
 - 7.6 Insertion; revision; replacement; removal of cardiac pacemaker or cardioverter/defibrillator [48]
 - 7.6.1 Insertion; revision; replacement; or removal of pacemaker leads
 - 7.6.2 Insertion; revision; replacement; or removal of pacemaker device
 - 7.6.3 Insertion; revision; replacement; or removal of cardioverter/defibrillator
 - 7.7 Other OR heart procedures [49]
 - 7.8 Extracorporeal circulation auxiliary to open heart procedures [50]
 - 7.9 Endarterectomy; vessel of head and neck [51]

- 7.1 Aortic resection; replacement or anastomosis [52]
- 7.11 Varicose vein stripping; lower limb [53]
- 7.12 Other vascular catheterization; not heart [54]
 - 7.12.1 Arterial catheterization
 - 7.12.2 Umbilical vein catheterization
 - 7.12.3 Venous catheterization
- 7.13 Peripheral vascular bypass [55]
- 7.14 Other vascular bypass and shunt; not heart [56]
- 7.15 Creation; revision and removal of arteriovenous fistula or vessel-to-vessel cannula for dialysis [57]
- 7.16 Hemodialysis [58]
- 7.17 Other OR procedures on vessels of head and neck [59]
- 7.18 Embolectomy and endarterectomy of lower limbs [60]
- 7.19 Other OR procedures on vessels other than head and neck [61]
 - 7.19.1 Interrupt vena cava
 - 7.19.2 Other OR procedures on blood vessels
- 7.2 Other diagnostic cardiovascular procedures [62]
- 7.21 Other non-OR therapeutic cardiovascular procedures [63]
- 8 Operations on the hemic and lymphatic system
 - 8.1 Bone marrow transplant [64]
 - 8.2 Bone marrow biopsy [65]
 - 8.3 Procedures on spleen [66]
 - 8.4 Other therapeutic procedures; hemic and lymphatic system [67]
 - 8.4.1 Biopsy of lymphatic structure
 - 8.4.2 Simple excision of lymphatic structure
 - 8.4.3 Regional lymph node excision
 - 8.4.4 Radical excision lymph nodes
 - 8.4.5 Other hemic and lymphatic procedures
- 9 Operations on the digestive system
 - 9.1 Therapeutic procedures on the esophagus
 - 9.1.1 Injection or ligation of esophageal varices [68]
 - 9.1.2 Esophageal dilatation [69]
 - 9.2 Upper gastrointestinal endoscopy; biopsy [70]
 - 9.2.1 Esophagoscopy
 - 9.2.2 Gastrosocopy
 - 9.2.3 Esophagogastroduodenoscopy (EGD) without biopsy
 - 9.2.4 Esophagogastroduodenoscopy (EGD) with biopsy
 - 9.2.5 Endoscopic biopsy small intestine
 - 9.3 Gastrostomy; temporary and permanent [71]
 - 9.4 Colostomy; temporary and permanent [72]
 - 9.5 Ileostomy and other enterostomy [73]
 - 9.6 Gastrectomy; partial and total [74]
 - 9.7 Small bowel resection [75]
 - 9.8 Colonoscopy and biopsy [76]
 - 9.8.1 Closed endoscopic biopsy of large intestine
 - 9.8.2 Other endoscopy of large intestine
 - 9.9 Proctoscopy and anorectal biopsy [77]
 - 9.1 Colorectal resection [78]
 - 9.10.1 Right hemicolectomy
 - 9.10.2 Left hemicolectomy
 - 9.10.3 Sigmoidectomy
 - 9.10.4 Resection of rectum
 - 9.10.5 Other colorectal resections
 - 9.11 Local excision of large intestine lesion (not endoscopic) [79]
 - 9.12 Appendectomy [80]
 - 9.13 Hemorrhoid procedures [81]

- 9.14 Endoscopic retrograde cannulation of pancreas (ERCP) [82]
- 9.15 Iopsy of liver [83]
- 9.16 Cholecystectomy and common duct exploration [84]
 - 9.16.1 Open cholecystectomy
 - 9.16.2 Laparoscopic cholecystectomy
 - 9.16.3 Incision of bile duct
- 9.17 Inguinal and femoral hernia repair [85]
 - 9.17.1 Unilateral repair inguinal hernia
 - 9.17.2 Bilateral repair inguinal hernia
 - 9.17.3 Femoral hernia repair
- 9.18 Other hernia repair [86]
 - 9.18.1 Umbilical hernia repair
 - 9.18.2 Incisional hernia repair
 - 9.18.3 Other abdominal wall hernia repair
 - 9.18.4 Other hernia repair
- 9.19 Laparoscopy [87]
- 9.2 Abdominal paracentesis [88]
- 9.21 Exploratory laparotomy [89]
- 9.22 Excision; lysis peritoneal adhesions [90]
- 9.23 Peritoneal dialysis [91]
- 9.24 Other bowel diagnostic procedures [92]
- 9.25 Other non-OR upper GI therapeutic procedures [93]
- 9.26 Other OR upper GI therapeutic procedures [94]
- 9.27 Other non-OR lower GI therapeutic procedures [95]
- 9.28 Other OR lower GI therapeutic procedures [96]
 - 9.28.1 Closure of stoma of large intestine
 - 9.28.2 Local excision of rectal lesion
 - 9.28.3 Incision of perirectal tissue
 - 9.28.4 Incision of perianal abscess
 - 9.28.5 Incision/excision of anal fistula
 - 9.28.6 Other lower GI procedures
- 9.29 Other gastrointestinal diagnostic procedures [97]
- 9.3 Other non-OR gastrointestinal therapeutic procedures [98]
- 9.31 Other OR gastrointestinal therapeutic procedures [99]
 - 9.31.1 Radical pancreaticoduodenectomy
 - 9.31.2 Incision abdominal wall
 - 9.31.3 Excision or destruction of peritoneal tissue
 - 9.31.4 Creation of cutaneoperitoneal fistula
 - 9.31.5 Other gastrointestinal therapeutic procedures
- 10 Operations on the urinary system
 - 10.1 Cystoscopy and other transurethral procedures
 - 10.1.1 Endoscopy and endoscopic biopsy of the urinary tract [100]
 - 10.1.2 Transurethral excision; drainage; or removal of urinary obstruction [101]
 - 10.1.3 Ureteral catheterization [102]
 - 10.2 Nephrotomy and nephrostomy [103]
 - 10.3 Nephrectomy; partial or complete [104]
 - 10.4 Kidney transplant [105]
 - 10.5 Genitourinary incontinence procedures [106]
 - 10.6 Extracorporeal lithotripsy; urinary [107]
 - 10.7 Indwelling catheter [108]
 - 10.8 Procedures on the urethra [109]
 - 10.9 Other diagnostic procedures of urinary tract [110]
 - 10.1 Other non-OR therapeutic procedures of urinary tract [111]
 - 10.11 Other OR therapeutic procedures of urinary tract [112]
- 11 Operations on the male genital organs
 - 11.1 Transurethral resection of prostate (TURP) [113]

- 11.2 Open prostatectomy [114]
- 11.3 Circumcision [115]
- 11.4 Diagnostic procedures; male genital [116]
- 11.5 Other non-OR therapeutic procedures; male genital [117]
- 11.6 Other OR therapeutic procedures; male genital [118]
 - 11.6.1 Unilateral orchiectomy
 - 11.6.2 Bilateral orchiectomy
 - 11.6.3 Orchiopexy
 - 11.6.4 Insert or replace penile prosthesis
 - 11.6.5 Other male genital procedures
- 12 Operations on the female genital organs
 - 12.1 Oophorectomy; unilateral and bilateral [119]
 - 12.2 Other operations on ovary [120]
 - 12.3 Ligation of fallopian tubes [121]
 - 12.4 Other operations on fallopian tubes [123]
 - 12.5 Hysterectomy; abdominal and vaginal [124]
 - 12.5.1 Total abdominal hysterectomy
 - 12.5.2 Vaginal hysterectomy
 - 12.5.3 Other hysterectomy
 - 12.6 Other excision of cervix and uterus [125]
 - 12.7 Abortion (termination of pregnancy) [126]
 - 12.8 Dilatation and curettage (D&C); aspiration after delivery or abortion [127]
 - 12.9 Diagnostic dilatation and curettage (D&C) [128]
 - 12.1 Repair of cystocele and rectocele; obliteration of vaginal vault [129]
 - 12.11 Other diagnostic procedures; female organs [130]
 - 12.12 Other non-OR therapeutic procedures; female organs [131]
 - 12.13 Other OR therapeutic procedures; female organs [132]
- 13 Obstetrical procedures
 - 13.1 Episiotomy [133]
 - 13.2 Cesarean section [134]
 - 13.3 Forceps; vacuum; and breech delivery [135]
 - 13.3.1 Low forceps delivery with episiotomy
 - 13.3.2 Vacuum extraction with episiotomy
 - 13.3.3 Other vacuum extraction
 - 13.3.4 Other forceps or breech delivery
 - 13.4 Artificial rupture of membranes to assist delivery [136]
 - 13.5 Other procedures to assist delivery [137]
 - 13.5.1 Induction of labor by artificial rupture of membranes
 - 13.5.2 Medical induction of labor
 - 13.5.3 Other manually assisted labor
 - 13.5.4 Other delivery procedures
 - 13.6 Diagnostic amniocentesis [138]
 - 13.7 Fetal monitoring [139]
 - 13.8 Repair of current obstetric laceration [140]
 - 13.8.1 Repair of obstetric laceration of uterus or cervix
 - 13.8.2 Repair of obstetric laceration of bladder or urethra
 - 13.8.3 Repair of obstetric laceration of rectum or sphincter
 - 13.8.4 Repair of other obstetric laceration
 - 13.9 Other therapeutic obstetrical procedures [141]
 - 13.1 Removal of ectopic pregnancy [122]
- 14 Operations on the musculoskeletal system
 - 14.1 Partial excision bone [142]
 - 14.2 Bunionectomy or repair of toe deformities [143]
 - 14.3 Treatment of fracture or dislocation
 - 14.3.1 Treatment; facial fracture or dislocation [144]
 - 14.3.2 Treatment; fracture or dislocation of radius and ulna [145]

- 14.3.3 Treatment; fracture or dislocation of hip and femur [146]
- 14.3.4 Treatment; fracture or dislocation of lower extremity (other than hip or femur) [147]
- 14.3.5 Other fracture and dislocation procedure [148]
- 14.4 Arthroscopy [149]
 - 14.4.1 Arthroscopy of knee
 - 14.4.2 Other arthroscopy
- 14.5 Division of joint capsule; ligament or cartilage [150]
- 14.6 Excision of semilunar cartilage of knee [151]
- 14.7 Arthroplasty
 - 14.7.1 Arthroplasty knee [152]
 - 14.7.2 Hip replacement; total and partial [153]
 - 14.7.3 Arthroplasty other than hip or knee [154]
- 14.8 Arthrocentesis [155]
- 14.9 Injections and aspirations of muscles; tendons; bursa; joints and soft tissue [156]
- 14.1 Amputation of lower extremity [157]
 - 14.10.1 Amputation of toe
 - 14.10.2 Amputation through foot
 - 14.10.3 Below knee amputation
 - 14.10.4 Above knee amputation
 - 14.10.5 Other lower extremity amputation
- 14.11 Spinal fusion [158]
- 14.12 Other diagnostic procedures on musculoskeletal system [159]
- 14.13 Other therapeutic procedures on muscles and tendons [160]
 - 14.13.1 Rotator cuff repair
 - 14.13.2 Other suture of muscle; tendon and fascia
 - 14.13.3 Other muscle and tendon procedures
- 14.14 Other OR therapeutic procedures on bone [161]
- 14.15 Other OR therapeutic procedures on joints [162]
- 14.16 Other non-OR therapeutic procedures on musculoskeletal system [163]
- 14.17 Other OR therapeutic procedures on musculoskeletal system [164]
- 15 Operations on the integumentary system
 - 15.1 Procedures on the breast
 - 15.1.1 Breast biopsy and other diagnostic procedures on breast [165]
 - 15.1.2 Lumpectomy; quadrantectomy of breast [166]
 - 15.1.3 Mastectomy [167]
 - 15.2 Incision and drainage; skin and subcutaneous tissue [168]
 - 15.3 Debridement of wound; infection or burn [169]
 - 15.4 Excision of skin lesion [170]
 - 15.5 Suture of skin and subcutaneous tissue [171]
 - 15.6 Skin graft [172]
 - 15.7 Other diagnostic procedures on skin and subcutaneous tissue [173]
 - 15.8 Other non-OR therapeutic procedures on skin and breast [174]
 - 15.8.1 Aspiration of skin and subcutaneous tissue
 - 15.8.2 Insertion of totally implantable vascular access device
 - 15.8.3 Debridement of nail
 - 15.8.4 Other skin and breast procedures; non-OR
 - 15.9 Other OR therapeutic procedures on skin and breast [175]
 - 15.9.1 Bilateral reduction mammoplasty
 - 15.9.2 Excision pilonidal cyst or sinus
 - 15.9.3 Other skin and breast procedures; OR
- 16 Miscellaneous diagnostic and therapeutic procedures
 - 16.1 Other organ transplantation [176]
 - 16.2 Computerized axial tomography (CT) scan
 - 16.2.1 Computerized axial tomography (CT) scan head [177]
 - 16.2.2 CT scan chest [178]
 - 16.2.3 CT scan abdomen [179]

- 16.2.4 Other CT scan [180]
- 16.3 Myelogram [181]
- 16.4 Mammography [182]
- 16.5 Routine chest X-ray [183]
- 16.6 Intraoperative cholangiogram [184]
- 16.7 Upper gastrointestinal X-ray [185]
- 16.8 Lower gastrointestinal X-ray [186]
- 16.9 Intravenous pyelogram [187]
- 16.1 Cerebral arteriogram [188]
- 16.11 Contrast aortogram [189]
- 16.12 Contrast arteriogram of femoral and lower extremity arteries [190]
- 16.13 Arterio or venogram (not heart and head) [191]
- 16.14 Diagnostic ultrasound
 - 16.14.1 Diagnostic ultrasound of head and neck [192]
 - 16.14.2 Diagnostic ultrasound of heart (echocardiogram) [193]
 - 16.14.3 Diagnostic ultrasound of gastrointestinal tract [194]
 - 16.14.4 Diagnostic ultrasound of urinary tract [195]
 - 16.14.5 Diagnostic ultrasound of abdomen or retroperitoneum [196]
 - 16.14.6 Other diagnostic ultrasound [197]
- 16.15 Magnetic resonance imaging [198]
- 16.16 Electroencephalogram (EEG) [199]
- 16.17 Nonoperative urinary system measurements [200]
- 16.18 Cardiac stress tests [201]
- 16.19 Electrocardiogram [202]
- 16.2 Electrographic cardiac monitoring [203]
- 16.21 Swan-Ganz catheterization for monitoring [204]
- 16.22 Arterial blood gases [205]
- 16.23 Microscopic examination (bacterial smear; culture; toxicology) [206]
- 16.24 Radioisotope scan
 - 16.24.1 Radioisotope bone scan [207]
 - 16.24.2 Radioisotope pulmonary scan [208]
 - 16.24.3 Radioisotope scan and function studies [209]
 - 16.24.4 Other radioisotope scan [210]
- 16.25 Therapeutic radiology [211]
- 16.26 Physical therapy
 - 16.26.1 Diagnostic physical therapy [212]
 - 16.26.2 Physical therapy exercises; manipulation; and other procedures [213]
 - 16.26.3 Traction; splints; and other wound care [214]
 - 16.26.4 Other physical therapy and rehabilitation [215]
- 16.27 Respiratory intubation and mechanical ventilation [216]
 - 16.27.1 Endotracheal intubation
 - 16.27.2 Continuous mechanical ventilation less than 96 hours
 - 16.27.3 Continuous mechanical ventilation 96 hours or more
 - 16.27.4 Other respiratory intubation and mechanical ventilation
- 16.28 Other respiratory therapy [217]
 - 16.28.1 Respiratory medication administered by nebulizer
 - 16.28.2 Oxygen therapy
 - 16.28.3 Other respiratory treatments
- 16.29 Psychological and psychiatric evaluation and therapy [218]
 - 16.29.1 Psychiatric drug therapy
 - 16.29.2 Electroconvulsive therapy
 - 16.29.3 Individual psychotherapy
 - 16.29.4 Other psychological and psychiatric evaluation and therapy
- 16.3 Alcohol and drug rehabilitation/ detoxification [219]
 - 16.30.1 Alcohol rehabilitation
 - 16.30.2 Alcohol detoxification

- 16.30.3 Alcohol rehabilitation and detoxification
- 16.30.4 Drug rehabilitation
- 16.30.5 Drug detoxification
- 16.30.6 Drug rehabilitation and detoxification
- 16.30.7 Alcohol and drug rehabilitation
- 16.30.8 Alcohol and drug detoxification
- 16.30.9 Alcohol and drug rehabilitation and detoxification
- 16.31 Ophthalmologic and otologic diagnosis and treatment [220]
- 16.32 Nasogastric tube [221]
- 16.33 Blood transfusion [222]
- 16.34 Enteral and parenteral nutrition [223]
- 16.35 Cancer chemotherapy [224]
- 16.36 Conversion of cardiac rhythm [225]
- 16.37 Other diagnostic radiology and related techniques [226]
- 16.38 Other diagnostic procedures (interview; evaluation; consultation) [227]
- 16.39 Prophylactic vaccinations and inoculations [228]
- 16.4 Nonoperative removal of foreign body [229]
- 16.41 Extracorporeal shock wave lithotripsy; other than urinary [230]
- 16.42 Other therapeutic procedures [231]
 - 16.42.1 Inject antibiotic
 - 16.42.3 Injection of Thromobolytic Agent (not coronary)
 - 16.42.4 Other therapies